JPRS 69963

13 October 1977

WORLD

WIDE

WORLD EPIDEMIOLOGY REVIEW

No. 87

DISTRIBUTION STATEMENT A
Approved for Public Release
Distribution Unlimited

U. S. JOINT PUBLICATIONS RESEARCH SERVICE

20000405 017

Reproduced From
Best Available Copy

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22151. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Indexes to this report (by keyword, author, personal names, title and series) are available through Bell & Howell, Old Mansfield Road, Wooster, Ohio, 44691.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

BIBLIOGRAPHIC DATA SHEET	1. Report No. JPRS 69963	2.	3. Recipient's Accession No.
4. Title and Subtitle WORLD EPIDEMIOLOGY REVIEW, No. 87			5. Report Date 13 October 1977 6.
7. Author(s)			8. Performing Organization Rept. No.
9. Performing Organization Name and Address Joint Publications Research Service 1000 North Glebe Road Arlington, Virginia 22201			10. Project/Task/Work Unit No. 11. Contract/Grant No.
12. Sponsoring Organization Name and Address As above			13. Type of Report & Period Covered 14.

15. Supplementary Notes

16. Abstracts

The report contains worldwide press and radio coverage of incidence, outbreak, and other aspects of human, animal, and plant diseases, insect pests and control, sanitation conditions, immunization and public health programs.

17. Key Words and Document Analysis. 17a. Descriptors

Worldwide
Clinical Medicine
Environmental Biology
Hygiene and Sanitation
Microbiology

17b. Identifiers/Open-Ended Terms

17c. COSATI Field/Group 2E, 6E, 6F, 6I, 6M

18. Availability Statement	19. Security Class (This Report)	21. No. of Pages
Unlimited Availability Sold by NTIS Springfield, Virginia 22151	UNCLASSIFIED	229
	20. Security Class (This Page) UNCLASSIFIED	22. Price PC A11

FORM NTIS-35 (REV. 3-72) THIS FORM MAY BE REPRODUCED USCOMM-DC 14952-P72

JPRS 69963

13 October 1977

WORLD EPIDEMIOLOGY REVIEW

No. 87

This serial publication, based on worldwide press and radio reports, contains information on the epidemiology of human, animal, and plant diseases. Disease incidence, reported outbreaks, and various related epidemiological factors are included. Items are presented by country of occurrence rather than by country of original press report.

CONTENTS PAGE

I. GENERAL

Worldwide Reports on Cholera Outbreak

GENERAL..... 1
BANGLADESH..... 8
BRAZIL..... 9
CYPRUS..... 11
EGYPT..... 11
INDIA..... 12
IRAN..... 13
IRAQ..... 16
ISRAEL..... 18
JORDAN..... 19
KUWAIT..... 23
LAOS..... 24
LEBANON..... 24
MALAYSIA..... 28
NEPAL..... 30
NETHERLANDS..... 30
SAUDI ARABIA..... 30
SINGAPORE..... 31
SYRIA..... 31
TURKEY..... 31
VENEZUELA..... 46
WEST GERMANY..... 46

CONTENTS (Continued) Page

II. HUMAN DISEASES

ARGENTINA..... 47
AUSTRALIA..... 54
BRAZIL..... 60
BURMA..... 74
CAMBODIA..... 74
CUBA..... 76
CYPRUS..... 87
EAST GERMANY..... 88
FRANCE..... 95
GUINEA-BISSAU..... 97
INDIA..... 98
INDONESIA..... 103
ISRAEL..... 104
ITALY..... 105
LAOS..... 106
LIBYA..... 106
MALAYSIA..... 107
MOZAMBIQUE..... 108
NEW ZEALAND..... 110
PEOPLE'S REPUBLIC OF CHINA..... 111
PERU..... 113
REPUBLIC OF SOUTH AFRICA..... 114
RHODESIA..... 117
SAUDI ARABIA..... 118
SRI LANKA..... 119
SUDAN..... 119
TANZANIA..... 120
TURKEY..... 122
UGANDA..... 128
URUGUAY..... 129
VENEZUELA..... 133
VIETNAM..... 171
ZAIRE..... 174
ZAMBIA..... 187

III. ANIMAL DISEASES

ARGENTINA..... 190
AUSTRALIA..... 191
BRAZIL..... 191
CUBA..... 196
GABON..... 196
INDIA..... 197
NEW ZEALAND..... 197
PERU..... 198

CONTENTS (Continued) Page

PORTUGAL..... 198
SENEGAL..... 199
SPAIN..... 200
TANZANIA..... 202
TURKEY..... 202
UGANDA..... 203
URUGUAY..... 203
VENEZUELA..... 206
VIETNAM..... 208

IV. PLANT DISEASES AND INSECT PESTS

AUSTRALIA..... 210
BOTSWANA..... 211
BRAZIL..... 216
CUBA..... 217
NICARAGUA..... 220
PEOPLE'S REPUBLIC OF CHINA..... 221

I. GENERAL

WORLDWIDE REPORTS ON CHOLERA OUTBREAK

GENERAL

Warsaw ZYCIE WARSZAWY in Polish 31 Aug 77 p 4 WA

[Text] The PAP [Polish Press Agency] correspondent in Sofia, Maciej Pedzich, writes: In accordance with a decree of the Bulgarian authorities, individual tourists who are not members of organized trips and are returning from Turkey after crossing the Bulgarian-Turkish border must leave Bulgaria within 12 hours. If not, they will have to undergo a several-week quarantine in Bulgaria.

This decree was taken in connection with the cases of illnesses caused by cholera in Turkey. This does not pertain to tourists taking part in organized trips--individual or group--who, in accordance with the trip's program, can remain in Bulgaria longer.

Damascus SANA in Arabic 1245 GMT 3 Sep 77 JN

[Text] Damascus, 3 Sep--The Jordanian health minister arrived in Damascus this morning on a visit during which he will discuss health matters of concern to the two fraternal countries and the coordination of effective steps and measures which should be taken in the two countries to combat the cholera epidemic. He was received at the unified border point in Dar'a by the health minister, Dr Madani Khiyami. Dr Khiyami and his guest made an inspection visit to the quarantine center at Dar'a and observed the measures being taken to prevent cholera.

Damascus SANA in Arabic 1750 GMT 3 Sep 77 JN

[Excerpt] Damascus, 3 Sep--The Syrian Arab and Jordanian sides have agreed to take joint health measures to contain the cholera epidemic,

prevent its spread and eliminate it. The Syrian Arab and Jordanian sides held a meeting at noon today at the conference hall of the Health Ministry under the Syrian health minister, Dr Madani Khiyami, and the Jordanian health minister, 'Abd al-Ra'uf ar-Rawabidah. High-ranking officials of the two ministries also attended the meeting. They reviewed the health measures taken to combat the cholera epidemic. They also discussed the coordination of work in the health field and the adoption of joint measures to contain and combat the cholera epidemic. At the end of the meeting, the two ministers visited Ibn Nafis Hospital to acquaint themselves with the condition of cholera patients and the methods used in their treatment.

Amman Domestic Television Service in Arabic 1800 GMT 4 Sep 77 JN

[Excerpts] Acting Health Minister 'Abd ar-Ra'uf ar-Rawabidah returned to Amman from Damascus this afternoon after holding talks with Dr Madani al-Khaymi, Syrian health minister, on the coordination of the measures necessary to curtail the cholera epidemic. In reply to many inquiries, the minister had this to say about the issue: [begin recording]

Brother citizens, peace be upon you. During recent months, the neighboring regions have been exposed to a cholera epidemic. The Health Ministry, together with the appropriate authorities, has taken all the necessary precautions and measures to prevent the disease from assuming epidemic proportions and to control its effects when it is contracted. Despite these precautions and in view of the easy travel at the present time, the first cholera case has appeared in Amman. It was contracted by a person who arrived from outside the kingdom and the symptoms developed 2 days after he arrived. Other cases began to appear in places where the state of hygiene is very low. Some 21 cases have been admitted to the kingdom's hospitals.

It is reassuring that none of these cases was severe. Most were cured very quickly and have been discharged from the hospital. So far cholera has not assumed epidemic proportions. However, we must not be complacent because cholera is in nearby regions and its control does not depend on the Health Ministry and the appropriate departments alone, but also on the citizens who must support these measures in order to protect society, their families and themselves. Personal and public hygiene must be carefully practiced and the instructions of the Health Ministry followed. Modern scientific measures do not depend on inoculations to control and curtail this disease. Therefore, the ministry considers inoculations to be optional at all its centers. The ministry is supervising all water resources and all other works pertaining to public hygiene. [end recording]

Amman JNA in Arabic 0935 GMT 4 Sep 77 JN

[Text] Damascus, 4 Sep--Syrian Prime Minister Maj Gen 'Abd al-Rahman Khulayfawi yesterday received acting Health Minister 'Abd ar-Ra'uf ar-Rawabidah. Following the meeting a responsible source stated that the discussion dealt with health relations between the two fraternal countries, cooperation between them to combat the spread of cholera and coordination of the measures being taken in this respect. Health discussions between the Jordanian and the Syrian sides will resume tomorrow, Monday.

Warsaw TRYBUNA LUDU in Polish 6 Sep 77 p 2

[Article by J. Urbaniak]

[Text] The cholera epidemic in Syria and Jordan and the threat of its shifting to other Near East countries brings to mind in a drastic way the hygiene and medical problems of that region.

The press and other mass media point to the littered cities. Also cited are WHO data which indicate that in the countries of the eastern part of the Mediterranean Sea, as a result of the rapidly increasing population, the percentage of people who have access to potable water (frequently impure also) decreased in the years 1970-1975 from 56 to 52 percent, and in the rural areas from 19 to 16 percent. In this same zone only 10 percent of the townspeople are able to benefit from sanitation installations.

In many countries of the Near East there is still a lack of doctors, especially in the rural areas.

In recent years an increase in illnesses due to malaria has been noted here also. Two years ago only 5 percent of the people of the Near East lived in malaria-free regions. Infant mortality is always high also. In certain countries, especially in Egypt and Sudan, bilharziasis plagues a significant portion of the population.

Warsaw ZYCIE WARSZAWY in Polish 12 Sep 77 p 6

[Text] Cairo, London (PAP)--News has arrived from the Middle East region about new cases of cholera. In Syria, 38 new cases have been registered, and the total number has risen to 2,105, including 68 deaths.

In neighboring Jordan, 28 new cases have been discovered. The total number of cholera cases now amounts to 166 in that country; however, the Jordanian authorities claim that there have been no fatalities as yet.

A Danish ship suspected of carrying persons with cholera received instructions to leave the Egyptian port of Alexandria, where it had sailed from Beirut.

Cases of cholera have appeared also on the other side of the globe. From the Gilbert Islands, a British colony in the South Pacific, information has been received about the death of nine persons who had become ill with cholera.

Warsaw TRYBUNA LUDU in Polish 13 Sep 77 p 8

[Text] Cairo (PAP)--The cholera epidemic now encompasses nearly all the countries of the Near and Middle East. Recent reports indicate that cases of illness have been registered in Saudi Arabia and the Persian Gulf countries. The focus of the epidemic is in Syria, where according to official data, over 70 persons have died already and the hospitals are overcrowded. The disease is rampant also in Lebanon--there is only the lack of data concerning the number of illnesses and mortalities.

Tightened hygiene control measures have been introduced in all the countries of the Near East. The lack of vaccines, however, makes widescale protective vaccinations impossible. The stocks of the serum are sufficient for the health services, and port and airport personnel.

Warsaw TRYBUNA LUDU in Polish 17-18 Sep 77 pp 1, 2

[Article by TRYBUNA LUDU Near East correspondent Jan Urbaniak]

[Text] At the moment there is no prognosis for a rapid extinction of the cholera epidemic in the Near East. In Syria it is claimed that this will require at least 2 months. In that country--according to official data--nearly 2,300 persons have become ill and nearly 70 have died.

The number of ill persons in Jordan has reached 290 and in Lebanon--21. Iran for several days has indicated that it has a number of illnesses. Saudi Arabia has also noted several cases.

The next cases of cholera illness in the Near East was noted on a Danish ship which is lying off Alexandria flying the yellow flag signifying a quarantine. One of the crew members died this week of cholera. Cholera indications were confirmed in four other sailors on that ship.

The health ministers of the Arab states are gathering in Cairo on 24 September to hold a council on measures to block the spreading of the grave disease. The matter is all the more urgent in that shortly after Ramadan ends on 13 September, mass pilgrimages to Mecca begin.

Warsaw ZYCIE WARSZAWY in Polish 16 Sep 77 p 4

[Text] Paris (PAP)--The cholera epidemic is spreading and cases of illnesses and deaths are being registered in the entire world--from the

Pacific and around the Near East. Western Europe has not been spared either. After individual cases of cholera in Great Britain, the FRG, and Italy, two more were registered on Thursday [15 September] in Holland.

The governments of many countries of the world are energetically undertaking measures either to nip the epidemic in the bud or not permit the disease to drag out. In France at the border crossings, persons coming from the contagion zones are being checked while all travelers going to the Near East must submit to inoculations. Similar measures have been adopted in many other countries of Europe.

A particularly alarming situation prevails in the Near East where the epidemic has embraced Jordan, Syria, and the Western Bank of Jordan. In Asia, where it is especially easy to have an epidemic, cholera is reaping a deadly harvest in India, Indonesia, and in Pakistan.

In the forthcoming days there is to be a meeting of the health ministers of these countries in order to discuss the means for combating cholera. According to reports from Jakarta, in Java in the past 3 days, 35 persons died of this disease and several hundred have been placed in hospitals.

Cairo Domestic Service in Arabic 1230 GMT 19 Sep 77 NC

[Text] The Arab League general secretariat today extended invitations for an urgent conference in Cairo next Saturday to formulate an integrated Arab plan in conjunction with the World Health Organization regional office to combat the cholera epidemic and stop it from spreading in the Arab states.

The conference will be attended by health care officials in the Arab states. Arab League health department director Dr Zaki Hamdi has stated that the purpose of the meeting is to prepare an integrated plan and to prepare the best means and allocate the funds needed to eliminate the cholera epidemic.

[Editorial Report] Warsaw TRYBUNA LUDU in Polish pages 1 and 2 and Warsaw ZYCIE WARSZAWY in Polish page 2 on 20 September 1977 carry similar reports on the status of the cholera epidemic.

"WHO, whose headquarters is in Geneva, received further reports on the centers of cholera in the various regions of Asia and the Near East. Within the sphere of the epidemic are Syria, Lebanon, Saudi Arabia, Kuwait, and Israel. Cholera has also appeared in the Gilbert Islands (in the Pacific) where 17 fatalities have been registered while the number of illnesses is steadily increasing, reaching the number of 352 persons; in Nepal and Turkey; and now recently also in Bangladesh where, according to official figures, 111 persons have died and the epidemic has spread to the

two next districts of the country. Individual cases have also been registered in Europe, among other places in the FRG, Holland, and in Italy. However, the high level of hygiene in the European countries excludes, according to the specialists, the possibility of this disease spreading there.

"In Damascus there was information on Sunday about 54 new cases although there have been no further deaths. Since the outbreak of the epidemic in July 1977, in Syria 2,389 illnesses caused by cholera and 71 fatal cases have been confirmed. In Jordan 14 new cases have been confirmed; and 26 illnesses have been confirmed to date in Lebanon.

"According to REUTER, cholera has also affected hundreds of Ethiopian soldiers imprisoned by the separatists in the military camp in Eritrea.

"A great uneasiness in the Muslim countries has been caused by the news of the outbreak of cholera in Saudi Arabia. Next month, thousands of pilgrims will be arriving in that country. Syrian and Jordanian authorities have summoned all persons intending to go to Mecca and Medina to present valid certifications of cholera inoculations.

"The cholera epidemic has spread to Malaysia where on 19 September 1977 in the state of Kedaj near the Thailand border one person has died and three others are under observation.

"AGENCE FRANCE PRESS reported on Monday that during the last several weeks at least 111 persons have died of cholera in Bangladesh. According to unconfirmed information, approximately 2,000 cases of illness have been confirmed in that country."

[Editorial Report] Warsaw ZYCIE WARSZAWY in Polish page 4 and Warsaw GLOS PRACY in Polish page 2 on 20 September 1977 publish an interview with the director of the Sanitary-Epidemiological Department of the Ministry of Health and Social Welfare, docent Wieslaw Magdzik, by PAP correspondent Danuta Drachal:

"Question: Is there a danger of the cholera spreading in Europe?

"Answer: In view of the rapid means of transport--airplane communication--the possibility of individual cases being transmitted exists. At the same time, however, I believe that the sanitary conditions in Europe, the development of the health service, and the methods which medicine uses in fighting this disease are in a position to localize and to control those individual illnesses and not allow the germ to spread.

"That disease is endemic (is constantly present) in many countries of the East and Africa. According to the World Health Organization statistics, the number of illnesses from cholera is always relatively high. For

example, during the period of significant increase, i.e., in 1974, it reached over 110,000 cases. Last year 66,000 cases were registered, including individual illnesses also in Europe--in Great Britain, Sweden, Yugoslavia, Spain, Holland, the FRG, and France.

"Question: What role do the inoculations fulfill?

"Answer: As distinguished from the other contagious diseases, they protect the organism for a relatively short period, only for one-half of a year, and beyond that they are less effective.

"Question: What advice should be given to persons arriving from countries in which this disease is occurring at present?

"Answer: The most important period are the 5-6 days from the moment it is contracted; this is the phase when the contagion spreads. That is why those persons who are returning from countries afflicted with cholera should not disregard the smallest stomach or digestive disorders, but should go to a doctor without delay. The health service has the wherewithal to control the disease swiftly.

"In Poland the last cases of cholera occurred during World War I. Since that time not another case of cholera has been registered."

Jerusalem THE JERUSALEM POST in English 20 Sep 77 p 2

[Text] The number of cholera cases in Israel yesterday remained at three, two in the Nablus area and one in a village near Ramallah. All other suspected cases proved to be other ailments.

The Health Ministry was continuing to make immediate and thorough tests of all suspected cases.

In Jordan, the government mobilized 800,000 school children in a campaign to clean up Amman, where 164 cholera cases have been reported in the present Middle East epidemic.

Students swept the street and cleared garbage under supervision of teachers and civil defence officials, on orders issued by the government's Higher Committee for Public Safety.

Jordan reported 14 fresh cholera cases on Sunday for a total of 351, in an outbreak that has stricken upwards of 3,000--and killed 71 persons--in neighbouring Syria and has spilled scattered, non-fatal cases into several other nearby countries.

Iran, officially reported still free of the disease, has had at least 20 cholera deaths, according to reports from reliable medical sources over the weekend.

Syria and Jordan have closed many restaurants, and all swimming pools, in a bid to cap the disease--contracted from infected water or food sources and often spread by human carriers in cramped, unsanitary environments.

Syria has stepped up a media campaign in the capital, and sent squadrons of trucks with loudspeakers to circle rural towns to get the local population to wash and cook all foods before eating them.

Syria has barred hotels and restaurants from serving any uncooked food.

Jordan and Lebanon have banned food imports from Syria.

Kuwait yesterday officially reported travellers from other, unnamed Arab countries, had introduced three cases of cholera into the country as the disease continued to spread in the Middle East.

Kuwaiti health minister Abdel Rahman al-Awadi said three cases had been discovered "during the past few days." He said all three had been "among new arrivals from other Arab states."

BANGLADESH

Dacca Domestic Service in English 0145 GMT 19 Sep 77 BK

[Text] The presidential advisor for health, Dr Mohammad Ibrahim, said that the government officials including family planning and rural health workers and educational assistants have been mobilized to fight the outbreak of cholera in certain areas of the country.

Dr Ibrahim, who visited the affected areas of Chandpur yesterday for a second time in a week, said the disease has broken out in epidemic form in the area. The presidential advisor, however, emphasized that there will be no dearth of drugs, doctors and nurses to cope with the situation. A field hospital with six doctors and six nurses has already been set up at (?Gabirhat in Chandpur police station) and more of them will be set up if necessary.

Preventive measures taken by the government to check the spread of disease are also underway. A huge quantity of medicines including anticholera vaccines, TOBC [as heard], halogens, bleaching powder, cholera fluid and chloromycetin will be reaching the affected areas today. Meanwhile, 100,000 vaccines, 300,000 water purification tablets, 2 drums of bleaching powder, 56 drums of cholera fluid and 1,000 [words indistinct] capsules have already been distributed in the affected areas.

The government has also strengthened its health education campaign in the affected areas. Leaflets and pamphlets on measures to be adopted by individuals for fighting the spread of cholera were air-dropped in the areas yesterday. The government has also deployed one volunteer for every 100 persons for imparting health education in cholera-affected areas.

Meanwhile, according to an official source, 57 people have died of cholera during the last few weeks in Chandpur and (Shatai) Nawabganj subdivision. Reports say about 15 cholera cases were treated (?only) yesterday from two police stations of the Chandpur division.

Hong Kong AFP in English 1040 GMT 20 Sep 77 BK

[Text] Dacca, Sept 20 (AFP)--The unofficial death toll in Bangladesh's worst cholera epidemic this year rose to 356 Monday as reports of a fresh outbreak of the disease poured in from five of the country's 19 districts. Officials in Dacca, however, confirmed only 68 deaths so far, 38 in Comilla and 30 in Rajshahi districts.

BRAZIL

Rio de Janeiro O GLOBO in Portuguese 16 Sep 77 p 7

[Text] Sao Paulo (O GLOBO)--Yesterday, the State of Sao Paulo's secretary of health, Walter Leser, said that he did not consider it likely that carriers of the cholera vibrio would enter Brazil. According to his statement, "Even if this were to occur, it would be extremely difficult to transmit, because the concentration of bacteria that the disease requires in order to be contracted is very large, and the conditions for mass communicability are demanding."

The secretary said that the prevention of cholera is mainly a matter of basic sanitation.

The secretary explained: "The carrier of the cholera virus transmits it through the feces. This transmission can very seldom occur as a result of handling, through what has been termed mouth origin. In the case of Sao Paulo, when an individual evacuates, his feces enter the Pinheiros, Tiete or Tamanduatei rivers. The water in those rivers is not consumed by the populace. The only chance of contamination would occur if the evacuation took place in cesspools and was transmitted from there to well-water." Leser concluded by saying: "In this instance, in addition to the fact that the necessary bacteria concentration would have to be large (we would already have located the sick person, owing to his serious clinical condition), the contamination would be limited to the group of individuals using the well."

Slight Risk

The chairman of the Cholera Committee of the State of Sao Paulo, Otavio Mercadante, said that one of the means of preventing the entry of the cholera virus into the national territory, namely, the application of sulfanilimide to air passengers arriving from abroad, is not feasible, owing to its high cost.

According to Mercadante, the current pandemic (the endemic situation which is a constant one in parts of the Far East, such as Bengal and sections of India, periodically spreads to other parts of the world) is considerably less serious for Brazil than it was in 1975. He explains the reason for this:

"There has, on occasion, been a serious epidemic in certain regions of Africa, including Angola. And it so happened that, in 1975, the wave of refugees migrating from Angola to Brazil was large. At the time, a security system was established, which included even the examination of feces of all immigrants arriving from Portugal and Angola, an examination which was made by the Adolfo Lutz Institute."

In any event, Mercadante suggested that care be taken to detect any possible cases of the disease. He claimed that cholera is extremely easy to diagnose. In addition to feeling dizzy and vomiting, the patient suffers from violent diarrhea, which causes him to lose from 20 to 30 liters of organic material per day.

Vaccines

Santos (O GLOBO)--During recent months, the Office of the Port Health Inspector in Santos has made a greater effort to obtain cholera vaccine; but Dr Emir Cury, who is in charge of the department, claims that this is in no way related to the epidemic that has already struck about 70 persons in the Middle East.

The doctor, in his explanation, attributed the increased concern over anticholera vaccine to the expansion of trade relations with African countries; because, in order to travel to the latter, one must be immunized against the disease.

Emir Cury remarked: "We are implementing the standard measures which apply to persons traveling to or from countries where there has been an outbreak of cholera."

Measures

Brasilia (O GLOBO)--Next week, the National Committee to Combat Cholera will meet in Rio de Janeiro, in order to devise recommendations for the port health services aimed at intensifying the measures involving sanitary precautions to combat the disease.

The policy was established by the Ministry of Health after the World Health Organization had confirmed the presence of a cholera epidemic in the Middle East. Specific action will be taken to exercise greater epidemiological precautions on aircraft and ships, among passengers and crew members.

As for the shipments arriving from the affected region, they are being carefully disinfected; passengers are receiving prophylactic treatment in the form of antibiotics; and steps are even being taken to vaccinate Brazilians who are fearful of contagion.

CYPRUS

Nicosia ZAMAN in Turkish 26 Aug 77 p 1 NC

[Excerpt] The Ministry of Health in the Turkish Federated State of Cyprus [TFSC] has taken broad measures against cholera, which has been observed in Syria and other Middle Eastern countries.

According to information given yesterday by the minister of health, Dr Ali Atun, to the TAK [TURKISH NEWS AGENCY CYPRUS] correspondent, the chlorine content in drinking water has begun to be controlled regularly; health service officials in various regions have been ordered to carry out laboratory tests, on an urgent basis, on observed suspicious cases, to inform the people about cholera and to warn them of its dangers.

Stating that the Ministry of Health has been put on the alert against cholera, Dr Ali Atun said that cholera vaccinations have been increased and that, in the first phase, all personnel working at ports of entry will be inoculated.

EGYPT

Cairo Domestic Service in Arabic 2000 GMT 31 Aug 77 NC

[Text] It has been decided to immunize 500,000 citizens working in (?quarantine) hospitals, ports, water departments and public hygiene against cholera.

An official source at the Health Ministry has stated that the ministry has adopted several other measures to prevent the spread of cholera to Egypt. He added that the ministry will increase the hygienic supervision of potable water by examining samples from water sources and networks. It will also inspect the water storage tanks in houses and water sources in the regions.

The official source affirmed that the situation in Egypt is reassuring but that all precautions must be adopted to prevent the spread of cholera from afflicted countries.

INDIA

Bombay THE TIMES OF INDIA in English 29 Aug 77 p 4 BK

[Text] Panaji, August 28--The Congress Leader, Mr. A. N. Naik, told newsmen here on Friday that he would urge the Lt-Governor to declare Mapuca and some other areas in North Goa as cholera-affected so that the Public Health Department may take effective measures to check the epidemic. He said that 31 persons, mostly women and children, had died during the past one month in North Goa, an equal number was being treated in hospital. Mr. Naik alleged that the government hospital in the cholera-affected area did not have anti-cholera vaccine.

Calcutta THE SUNDAY STATESMAN in English 4 Sep 77 p 3

[Text] Thirty cases of cholera were reported in Calcutta during the week ended August 27, against 23 during the earlier week. Thirty-nine such cases had been reported in the city during the corresponding fortnight last year, according to a report issued by Calcutta Corporation.

Madras THE HINDU in English 12 Sep 77 p 6

[Text] Hyderabad, Sept. 11--Mr. L. Lakshmanadas, Andhra Pradesh Minister for Religious Endowments, and Mr. K. Purushothama Naidu, Commissioner for Religious Endowments, are flying to Tirupati on September 12 to discuss the steps to be taken to combat cholera in the pilgrim town.

The Minister told pressmen that there were incidence of cholera during last week in Tirupati. The number of people affected was about 330 and two cases proved fatal. The Minister will discuss with Health officials measures to prevent the spread of cholera.

The Minister said that there was urgent need for taking foolproof preventive steps in view of the Brahmothsavam festival from September 15 to 23.

Madras THE HINDU in English 21 Sep 77 p 9

[Text] Tirupati, Sep. 20--A team of health staff of Nellore district has been deputed to Chittoor, which has been notified as cholera-infected area. The epidemic has claimed six lives. According to Municipal Health Officer,

Tirupati, Dr. I. Kasi, so far one lakh inoculations, covering 30,000 pilgrams, have been given to check the spread of cholera. All inlets of pilgrim flow into Tirupati, railway stations, bus depots, and choultries, have been provided with inoculation booths and none is being allowed to enter the town without a certificate.

The Brahmothsavam at Tirumala has virtually lost its charm this time since pilgrim influx to Tirumala has dwindled due to the outbreak of cholera. On September 17, only about 18,000 pilgrims visited Tirumala.

The organisers of the National Convention of Farmers of India have postponed their two-day convention scheduled to commence here on September 26.

Anantapur Town Hit

The District Collector has notified Anantapur town as cholera-infected following eight cases admitted in the Government Headquarters Hospital. They were all treated and discharged from the hospital.

Cholera which claimed so far nine lives in various parts of Kurnool district in the last ten days had been brought under control, it was officially stated here.

Madras THE HINDU in English 22 Sep 77 p 10

[Text] Madras, Sept. 21--In view of prevalence of cholera in Tirupati, the Madras Corporation authorities have taken steps to inoculate passengers proceeding to Tirupati from Express Bus Stand in Esplanade. The Railway authorities have also taken similar measures at the Central Station. According to the civic authorities the city is free from cholera.

IRAN

Teheran TEHRAN JOURNAL in English 13 Sep 77 p 3

[Text] Tehran--A spokesman for the Ministry of Health and Welfare said yesterday there had been no cholera cases reported in Iran.

However, all medical authorities had been told to keep a sharp lookout for victims of the disease, he added.

Hospitals throughout the country have been instructed to admit people showing signs of cholera and to keep them in isolation.

The ministry has instructed the Pasteur Institute to give anti-cholera inoculations to all Iranians planning to leave the country. The ministry

has also ordered health officials at border points not to allow travelers without valid vaccination certificates to enter Iran.

The spokesman said all border entry points in West and South Iran were under the strict supervision of health officials.

He said there was no threat of a cholera outbreak and that any possible cases would be treated at government hospitals.

He said a number of people with cholera symptoms had been admitted to hospitals but had later been released.

The ministry has asked the public to wash all fruits and vegetables before eating. Cholera is easily caught from unwashed fruits and vegetables.

Teheran TEHRAN JOURNAL in English 17 Sep 77 p 3

[Text] Tehran--The Tehran Health Department Wednesday put all medical personnel on full-alert following the discovery of a number of El-Tor cases in Tehran. El-Tor is a deadly form of cholera.

And the Central Province Director General for Health has cancelled leave for all government health workers and ordered them to stand-by in case an epidemic should break out.

On Wednesday, provincial Health Department officials held an emergency meeting to discuss ways of preventing an El-Tor epidemic. A Tehran Health Department spokesman described the meeting as "very important" and said the department's director general would take no incoming telephone calls until the discussion was over.

Reliable sources reported yesterday that a number of El-Tor victims had been treated in Tehran hospitals. They said ambulances used to bring the patients to hospital had after been thoroughly disinfected.

Hospitals in the provinces have completed preparations for the treatment of cholera victims.

The Ministry of Health and Welfare has announced that anti-cholera vaccine is available at all medical centers. A ministry spokesman has recommended that the public be inoculated against cholera as soon as possible.

Reports reaching the capital from Zahedan indicate that all people living along Iran's border with Pakistan have been inoculated as a precautionary measure.

Teheran TEHRAN JOURNAL in English 18 Sep 77 p 1

[Excerpt] Zanjan--The deadly cholera-type disease El Tor reported to have claimed 15 lives over the past few days in three isolated villages about 80 kilometers from here. [as published]

The deaths, preceded by severe vomiting and diarrhoea, have taken place in the villages of Tazehkan, Feelekhasseh, and Daleki.

Deputy Health and Welfare Minister George Soupekian yesterday told the JOURNAL that he was in contact with regional health director to obtain confirmation of the report, but he said he had not received any report to this effect up to date.

Soupekian added that he had ordered the immediate dispatch of several medical teams to the area where the disease has been reported.

Health authorities told the JOURNAL on telephone that they had admitted a number of cholera suspects to Shahnaz hospital.

Teheran TEHRAN JOURNAL in English 19 Sep 77 p 3

[Text] Tehran--The Ministry of Health and Welfare yesterday issued a statement denying press reports that cholera had claimed 20 lives.

The statement said the TEHRAN JOURNAL and KAYHAN newspapers had incorrectly reported that cholera had claimed the lives of fifteen people in villages near Zanjan and five in Behbahan.

The statement said the Governor of Zanjan had sent medical teams to the villages to check on the reports but that they had found no cases of cholera.

A team of Health Department medics was requested to investigate the report of five cholera fatalities in Behbahan. Its findings indicated that Malek Mohammad, reported by the KAYHAN to have died from the disease, had in fact suffered a fatal heart attack.

A ministry spokesman meanwhile said the cholera-type disease "el-tor" was completely under control and that anyone stricken by it would be treated at government medical centers.

The ministry has asked the public to observe standard health and hygiene procedures to avoid the possibility of el-tor spreading.

Teheran TEHRAN JOURNAL in English 20 Sep 77 p 3

[Text] Tehran--The Ministry of Information and Tourism has categorically denied United Press International (UPI) news agency reports of mass cholera deaths in Iran.

In an official statement issued yesterday, the ministry said UPI reports that local health authorities were holding back information on cholera fatalities were false and totally unfounded.

The statement said UPI correspondents may have misinterpreted the Health and Welfare Ministry statement on September 13 reporting a number of cholera cases in Iran.

The Ministry of Health and Welfare has officially informed the World Health Organization of the occurrence of cholera in Iran.

UPI recently quoted the TEHRAN JOURNAL and KAYHAN newspapers as saying there had been 20 cholera fatalities in Zanjan and Behbahan.

Yesterday's ministry statement said a JOURNAL reporter had been told of the supposed cholera deaths by a person living in a village near Zanjan. However no cases of cholera had been discovered in Zanjan.

The newspaper concerned had been informed of this fact but unfortunately had still published the incorrect report. Officials from the Health Ministry and the Zanjan governor's office visited the villages following publication of the report but had not found any deaths to have been caused by cholera.

The Ministry statement added that a KAYHAN newspaper article on September 17 which reported five deaths from cholera in Behbahan was also incorrect. A Ministry of Health and Welfare team sent to the town found that victims mentioned by KAYHAN had died of kidney and heart ailments.

The Ministry regretted these erroneous reports by the news agency and newspapers and stressed that freedom of the press did not give licence to publish incorrect, unverified news stories.

The statement warned that those who misused freedom of the press would be prosecuted.

IRAQ

Baghdad INA in Arabic 1320 GMT 6 Sep 77 JN

[Text] Baghdad, 6 Sep--A responsible source in the Health Ministry declared today that strict precautions have been taken to prevent cholera from

spreading to Iraq from neighboring countries. The source said that travelers to neighboring countries will not be allowed to leave Iraq unless they obtain a valid international certificate of inoculation against the disease. Travelers who enter Iraq from neighboring countries will not be allowed to enter unless they receive inoculations against the disease, which will be given free of charge at airports and border posts.

Baghdad INA in Arabic 0750 GMT 19 Sep 77 JN

[Excerpt] Baghdad, 19 Sep--Dr Sa'dun Khalifah, director of the Department of General Health Care [at the Health Ministry], has declared that Iraq is free from cholera.

Iraqi health authorities have been taking precautionary measures since the beginning of the summer to prevent the infiltration of cholera. These measures were intensified following the appearance of cholera cases in several neighboring countries. Investigation and control cards were distributed to passengers arriving in Iraq to make sure that they are free from cholera.

Baghdad INA in Arabic 1504 GMT 20 Sep 77 JN

[Text] Baghdad, 20 Sep--The Iraqi Health Ministry announced today that three cholera cases have been discovered, two in Baghdad Province and one in Basra Province in southern Iraq. Dr Sa'dun Khalifah, director of health control in Iraq, stated that since the beginning of summer, health authorities have taken broad and stringent precautionary measures in the wake of the cholera outbreak in neighboring countries. He said that the measures taken are reassuring and that the cholera cases have been adequately contained.

Baghdad INA in Arabic 1640 GMT 22 Sep 77 JN

[Text] Baghdad, 22 Sep--The health authorities here today discovered two new cholera cases in the city of Baghdad during the past 24 hours.

Dr Sa'dun Khalifah, director general of health care, said that seven carriers of the disease were also discovered; three in (Dhi Qar) Province and four in Basra Province in southern Iraq.

Dr Khalifah affirmed that all patients are in good condition and are recovering and that there were no serious cases or deaths.

Baghdad INA in Arabic 1332 GMT 26 Sep 77 JN

[Text] Baghdad, 26 Sep--The health authorities in Baghdad governorate discovered six cholera cases during the last 24 hours. In addition, eight people who are carriers of the disease were discovered, seven in Baghdad and one in Basra in southern Iraq.

Public Health Care Department sources have said that all those who were infected are recovering and that there have been no deaths since the outbreak of the epidemic.

ISRAEL

Paris AFP in English 1051 GMT 7 Sep 77 TA

[Text] Jerusalem, Sep 7 (AFP)--Only one case of cholera has been confirmed in Israel but three possible cases were under observation, the Health Ministry said today in connection with outbreaks in Syria and Jordan.

Vegetables grown on the West Bank of the Jordan near here have been destroyed by order of the ministry on suspicion that they were fertilized with sewage effluent.

In another move against cholera, all shipments of fruit and vegetables from Jordan have been banned for the time being.

Jerusalem Domestic Service in Hebrew 1000 GMT 10 Sep 77 NC

[Text] A second case of cholera has been discovered in Judaea and Samaria.

A Ministry of Health spokesman has said that the patient is a resident of Janin, aged 50, who returned from a visit to Jordan 5 days ago. She is presently hospitalized in a Nabulus hospital.

Jerusalem Domestic Service in Hebrew 0800 GMT 16 Sep 77 TA

[Text] Two additional cases of cholera have been discovered in Judaea and Samaria. In Bayt (?Mitya) in the Ramallah region, a 70-year-old man was diagnosed as having the disease. Yesterday, an American tourist who crossed the Allenby Bridge was diagnosed as being infected with the disease.

A total of four cholera cases are hospitalized in Judaea and Samaria.

Jerusalem Domestic Service in Hebrew 1100 GMT 16 Sep 77 TA

[Text] The emergency team dealing with the cholera situation has agreed with the health minister and the directorate of the Health Ministry not to close the bridges on the Jordan River now and not to immunize the population. Our correspondent Razi Barqa'i reports that the ministry experts agreed that immunizing residents and people entering via the bridges would make it hard to identify those who had the disease.

Our correspondent reports that to date three people infected with the disease have been discovered in the held territories. Two additional people are suspected of having the disease. The American tourist suspected this morning of having cholera is not infected with this disease. The Health Ministry reminds the people again to wash vegetables and fruit with soap and water and to follow proper sanitary rules.

Jerusalem Domestic Television Service in Hebrew 1912 GMT 17 Sep 77 TA

[Text] Three more cholera cases were discovered in Samaria towns today. Our correspondent Rafiq Halabi reports that two cholera cases were found in Nabulus and one in Tulkarm. Yesterday a few cases were found in the Ramallah area. So far seven cholera cases have been reported in the territories.

JORDAN

Amman ASH-SHA'B in Arabic 1 Sep 77 p 3 JN

[Excerpt] The health authorities and various medical services in all sectors have applied organizational measures and taken practical steps to prevent the spread of cholera. Dr Naji 'Ayyash, director of UNRWA medical services, has declared that a wide-scale inoculation campaign against cholera has been initiated in all refugee camps and UNRWA schools as a precautionary measures against cholera.

Muhammad ad-Dajani, director of the Environmental Health Department at the Ministry of Health, has advised citizens to wash fruits and vegetables well with antiseptic before consuming them. He also advised them to boil drinking water and to eat less fruit for the time being.

Dr Mustafa Barmawi, director of the Health Ministry laboratories, has confirmed that tests of water samples in Jordan have shown that the water is not contaminated. He said the health minister has given instructions to test mineral waters imported into Jordan. Dr Barmawi added: The Health Ministry laboratories will examine all workers at restaurants, coffee shops, bakeries and establishments serving food to insure that these workers are free from cholera.

Dr 'Abd ar-Rahman Far'wan, director of health affairs in Amman municipality, has declared that the municipality has decided to ban salads served at restaurants and to close down all restaurants at public and private schools to protect the health of the students. Refreshments, including ice cream, with the exception of refreshments and ice cream produced by owners of licensed factories under health supervision, are completely banned. Dr Far'wan said that it has been decided to give garbage collectors a 20 percent allowance as of yesterday so that they will double their efforts.

Amman Domestic Service in Arabic 1200 GMT 7 Sep 77 JN

[Text] Acting Minister of Health 'Abd ar-Ra'uf ar-Rawabidah announced today that the Ministry of Health has transformed the medical center in Ash-Shunah Ash-Shamaliyah to a field hospital to receive and treat cholera cases expected in the Jordan Valley. Ar-Rawabidah said that the establishment of this hospital will save time and effort for those in the Jordan Valley who catch cholera. The acting health minister said that the number of cholera cases registered since the outbreak of the disease a few days ago has reached 60--38 of these are still in hospitals though their condition is not serious.

On the other hand, the Syrian special committee to combat the cholera epidemic said that 81 new cholera cases have been detected in Damascus since last Friday. The committee said that no new fatalities have occurred and added that most of the victims were from the Yarmuk camp and Bilal quarter and that the health situation in other Syrian areas is satisfactory.

Amman ASH-SHA'B in Arabic 9 Sep 77 pp 1, 10 JN

[Excerpt] The Health Ministry yesterday issued a bulletin about the cholera cases in the kingdom's towns and villages up to yesterday, Thursday, 8 September. The bulletin included a table listing the names of towns and villages where there have been cholera cases as well as a list of the new cholera cases discovered in the last 2 days.

Amman AR-RA'Y in Arabic 10 Sep 77 p 1 JN

[Excerpt] Amman--The Health Ministry yesterday issued a bulletin about cholera cases in the kingdom's towns and villages up to last night. The bulletin said that all 144 cases were cured.

Amman Domestic Service in Arabic 1700 GMT 13 Sep 77 JN

[Excerpt] A responsible source in the Health Ministry stated today that the number of cholera cases today reached 261. That is an increase of 47 cases in the past 24 hours. The source added that so far 64 persons have been discharged from hospitals, having completely recovered.

Amman Domestic Service in Arabic 1900 GMT 14 Sep 77 JN

[Excerpt] The regular bulletin issued by the Health Ministry on cholera shows that there have been 28 new cases in various parts of the kingdom in the past 24 hours. The total number of persons afflicted by this epidemic since it first appeared in the country has thus reached 289. The health minister has reported that all these cases are recovering and that 88 persons have actually been discharged from hospitals. The minister reaffirmed that no deaths have been recorded.

Amman Domestic Service in Arabic 1600 GMT 15 Sep 77 JN

[Excerpt] The Permanent Committee for Public Safety resumed its meetings this afternoon under the acting prime minister, Dr 'Abd as-Salam al-Majali, to discuss matters related to the general health situation and to combating diseases and epidemics, including the necessary measures to deal with them in the future. The committee held its first meeting yesterday in the presence of the ministers of reconstruction and development, labor, interior, health, public works, municipal and rural affairs, the under secretaries, and the heads of the concerned departments.

An authoritative source at the Health Ministry has said that 25 cholera cases have been discovered in the last 24 hours, up to noon today. Thus the number of cases discovered since the start of the epidemic has reached 314. No deaths have occurred as a result of the cholera epidemic, and 42 patients have left hospitals in the last 24 hours after it was ascertained that they were cured.

Amman Domestic Service in Arabic 1900 GMT 15 Sep 77 JN

[Excerpt] Sulayman 'Arar, minister of interior and assistant military governor general, has issued a decision banning the import of all types of vegetables and fruits as of today and until further notice.

Amman Domestic Service in Arabic 1900 GMT 18 Sep 77 JN

[Text] The Health Ministry has published its daily report on cholera in which it announces the discovery of 14 cases during the past 24 hours in Amman, Az-Zarqa', Schniller [refugee camp] Ibrid, Wadi al-Yabis and

As-Sukhnah camp. The report says that most of the previous cases have been cured and no deaths have been reported. The total number of cholera cases is 351. The number of those cured is 184.

Amman Domestic Service in Arabic 1600 GMT 19 Sep 77 JN

[Excerpts] There have been 14 new cholera cases in the kingdom during the past 24 hours. The number of cholera cases in all parts of the kingdom has thus reached 365. A total of 210 persons have been discharged from hospitals after recovering, including 26 during the past 24 hours. The Health Ministry's regular bulletin on the epidemic reports that so far there have been no deaths due to cholera.

Amman Domestic Service in Arabic 1600 GMT 20 Sep 77 JN

[Excerpts] A responsible source in the Jordanian Health Ministry has announced that eight new cholera cases have been discovered in the kingdom during the past 24 hours. The number of cholera cases has thus reached 373 since the outbreak of the epidemic. The source added that 49 persons have been discharged from hospitals in the past 24 hours after recovering. The number of those who have been discharged from hospitals now totals 250. The source concluded by saying that so far there have been no deaths due to this disease.

Amman AR-RA'Y in Arabic 21 Sep 77 p 1 JN

[Text] Amman--The interior minister and assistant military governor-general has issued a defense order providing for the closure of the ice, soda water and gaseous water company--Pepsi Cola and Miranda--as of yesterday and until further notice.

Amman Domestic Service in Arabic 1600 GMT 21 Sep 77 JN

[Excerpts] Not a single cholera case has been recorded in Amman for the second consecutive day. However, eight new cases appeared during the past 24 hours in various parts of the kingdom. The Health Ministry's regular bulletin issued today said that the total number of cases in the kingdom has reached 381. The number of those who have been discharged from hospitals after recovering has reached 277, including 28 persons during the past 24 hours. The bulletin pointed out that so far no deaths due to cholera have been recorded.

Amman Domestic Service in Arabic 1600 GMT 24 Sep 77 JN

[Text] A regular bulletin issued today by the Health Ministry shows a decrease in the number of cholera cases. Only 4 cases occurred in the past 24 hours, 2 of them in Amman and 1 each in Ar-Ramtha and Zayy.

The Health Ministry's regular bulletin indicates that the number of cholera cases in Jordan is 397, of which 352 have recovered. The bulletin notes that so far there have been no deaths due to cholera.

Amman Domestic Service in Arabic 1600 GMT 26 Sep 77 JN

[Text] Health Ministry sources have reported that 2 new cholera cases were discovered during the past 24 hours, one in Irbid and the second in Ash-Shunah ash-Shamaliyah. The same sources report that 11 citizens have been discharged from hospitals during the past 24 hours after recovering.

Amman JNA in Arabic 1545 GMT 27 Sep 77 JN

[Text] Amman, 27 Sep--A responsible source in the Health Ministry today reported the discovery of three new cases of cholera in the kingdom during the past 24 hours. The source noted that 390 persons have so far been discharged from hospitals after recovering since the outbreak of this epidemic.

Amman JNA in Arabic 1515 GMT 28 Sep 77 JN

[Text] Amman, 28 Sep--Health Ministry sources have reported that 4 new cholera cases have been discovered in the kingdom during the past 24 hours, 2 in Az-Zarqa' and 1 each in Sahm al-Kaffarat and Al-Wadi al-Yabis. So far 397 citizens have been discharged from hospitals, including 7 during the past 24 hours.

KUWAIT

Doha QNA in Arabic 1130 GMT 19 Sep 77 NC

[Excerpts] Kuwait, 19 Sep--Kuwaiti Health Minister Dr 'Abd ar-Rahman al-'Awadi has announced the discovery of three light cases of cholera in Kuwait and said that the source of these cases are Jordan and Iraq.

The Kuwaiti newspaper AS-SIYASAH reports, on the other hand, that the Kuwaiti Passport and Citizenship Department has suspended the granting of visitors visas as part of the measures Kuwait is taking to prevent the spread of the cholera epidemic into the country.

LAOS

Vientiane BULLETIN QUOTIDIEN in French 4 Jun 77 p 8

[Text] The Public Health Department of the Nasaithong District, Vientiane launched since April, a prophylactic campaign for the benefit of the population of different villages of the district's nine communes.

Two health teams were sent there: one to give anticholera vaccinations, the other to spray DDT.

Vientiane BULLETIN QUOTIDIEN in French 16 Jun 77 p 5

[Text] The Public Health Department of the districts of Phon Hong and Hatsaiphong of the Vientiane province sent mobile health teams to vaccinate against cholera the inhabitants in 11 communes of these 2 districts. At the same time, these inhabitants, numbering 12,000, attended popularization talks on the rules of the three cleanliness principles. These teams are at present actively pursuing their mission.

LEBANON

Beirut Domestic Service in Arabic 0530 GMT 29 Aug 77 NC

[Text] Health Minister Dr Ibrahim Shu'aytu has said that Lebanon is completely free of any epidemic (waba'). He said that the Health Ministry has succeeded so far in preventing cholera from penetrating Lebanon thanks to the measures it has taken in collaboration with the Syrian health departments.

Beirut L'ORIENT LE JOUR in French 30 Aug 77 p 1

[Text] The department of health in Bekaa has entrusted health inspectors with the supervision of travelers' arrivals and departures at the Lebanese-Syrian border, at Masnaa and at Kaa, within the context of preventive measures against cholera. The department head, Dr Ibrahim Rizk has stated, in this connection, that a water control campaign has been launched at Zahle and that antiseptics have been sprinkled on the wells and on vacant lands. Vaccination has also been begun in Akkar and Bekaa.

Other measures are to be undertaken in a few days to prevent the cholera that has been raging in Syria for a week from spreading into Lebanon.

Beirut L'ORIENT LE JOUR in French 30 Aug 77 p 1

[Text] Vaccination is counseled as a preventive once cholera cases are reported in a country or district. In regard to preventive measures, they include first of all, food hygiene: avoid drinking ice water, ice cream, syrups and any kind of cold drinks in public places which one is not too sure of. Also avoid raw vegetables which have not been sterilized.

At home, it is important to boil water and wash vegetables and fruits very carefully. Personal hygiene is also necessary: washing one's hands each time one handles vegetables or fruits or anything of doubtful cleanliness.

As to the rest, different kinds of cholera do not exist but quite simply, several varieties of the cholera vibrios.

Cholera symptoms are as follows: persistent vomiting (violent vomiting without nausea), fever, diarrhea, "rice-water" stools with resultant dehydration of the system, hence the danger.

Curative treatment is necessary as soon as the individual manifests cholera symptoms. The treatment consists of serum, antibiotics and the consumption of the greatest amount possible of fluids.

In our day, cholera is not a fatal disease provided dehydration is prevented.

Beirut L'ORIENT LE JOUR in French 29 Aug 77 pp 1, 10

[Text] Dr Ibrahim Cheayto, minister of health, yesterday reaffirmed that no case of cholera has been disclosed in Lebanon and that the proper ministerial departments have taken preventive measures to hinder the epidemic from reaching Lebanon after having caused 35 deaths in Syria.

The minister stated more particularly that the steps taken, in cooperation with the Syrian ministerial departments of health, have so far proved to be effective.

It only remains now, Dr Cheayto continued, for the department of health to continue on the alert and enter into contact with WHO for the purpose of obtaining immediate assistance in the event of an epidemic in Lebanon.

During a reception, the minister made it known that a meeting would be held with the members of this department and that new measures would be adopted--in particular, a vaccine campaign in Akkar and Hermel as well as at the Lebanese-Syrian frontier posts where travelers continue to receive antibiotics before entering Lebanon.

Beirut Domestic Service in Arabic 1230 GMT 5 Sep 77 NC

[Excerpts] Public Health Minister Ibrahim Shu'aytu issued a decision today banning until further notice the entry into Lebanon of the following food from Syria: vegetables, fruits, fish, meat, milk and byproducts, confectionery goods, items made of flour such as bread and cookies, and soft drinks.

Health Ministry Director General Dr Robert Sa'adah said that two citizens have been taken to the American University Hospital in Beirut. Laboratory tests have proved that they are suffering from cholera of the (ogada) type, which is a mild type of cholera that does not call for anxiety.

Dr Sa'adah has called on citizens to maintain cleanliness, asserting that it is more important than vaccination, which he regards as unnecessary.

Beirut Domestic Service in Arabic 1730 GMT 7 Sep 77 NC

[Excerpt] Health Minister Dr Ibrahim Shu'aytu said today that there are three confirmed cholera cases in Lebanon and six suspected cases. The laboratory test results of the six suspected cases will be received today.

Dr Shu'aytu said that he has submitted a report to the cabinet on the health situation in the country and the spread of cholera. He declared that the Health Ministry has adopted measures at the instruction of the World Health Organization. The organization has advised Lebanon against the inoculation of citizens, although Lebanon is considering it.

Beirut Domestic Service in Arabic 1730 GMT 9 Sep 77 NC

[Text] As part of the official efforts to forestall the spread of cholera in Lebanon, President Sarkis chaired a meeting today at the presidential palace. Health Minister Dr Ibrahim Shu'aytu, Health Ministry Director General Dr Robert Sa'adah and the deans of the medical colleges at the Jesuit University and at the American University attended the meeting.

During the meeting possible measures for preventing the spread of cholera were discussed. The president stressed that all the necessary equipment must be available at the hospitals so that all the medical services and public health will be guaranteed.

Health Ministry Director General Dr Robert Sa'adah has said that as a result of laboratory tests nine cases of cholera have been officially confirmed so far. He said that three cases are under observation and that the results will be revealed tomorrow.

It is worth noting, as Dr Robert Sa'adah has said, that four of the confirmed cholera cases have recovered and that there have not been any deaths from cholera in Lebanon.

Beirut Domestic Service in Arabic 1730 GMT 10 Sep 77 NC

[Excerpt] There are now a total of eight cholera cases. Six of these have fully recovered and have been released from the hospital. The remaining two are recovering. This was announced by the secretary general of Health Ministry, Dr Robert Sa'adah.

Beirut Domestic Service in Arabic 0530 GMT 13 Sep 77 NC

[Text] Health Ministry Director General Dr Robert Sa'adah has announced that there are a total of 15 cases of cholera in Lebanon. These cases have been confirmed as cholera through laboratory tests, and the patients are from different areas of the country. Dr Sa'adah said these cases are imported. He added: We have made preparations at At-Turk hospital to receive suspect cases. None of the 15 cases is serious, and none of the patients has died yet.

Dr Robert Sa'adah called on the citizens not to heed rumors. Questioned about the rumors that there have been four cholera deaths at the American University Hospital and that the university hospital intends to contact the World Health Organization to declare Lebanon an epidemic country, Dr Sa'adah said: The report is not true. However, the declaration of an epidemic in the country will be made by agreement between the World Health Organization and the Health Ministry when the ministry actually feels that country and neighboring countries are in danger.

Beirut Domestic Service in Arabic 1730 GMT 14 Sep 77 NC

[Excerpt] There have been no deaths from cholera in Lebanon. The number of cases has increased by three--one each in Beirut, Zahlah and Tyre. The previous cases have fully recovered. Lebanese Health Minister Dr Ibrahim Shu'aytu will meet his Syrian counterpart to coordinate efforts to combat cholera. This was announced by the director general of the Ministry of Health, Dr Robert Sa'adah, to the reporter of the evening radio journal, Antoine Sa'adah. [begin recording]

[Question] Mr Sa'adah, are there any new cases of cholera in Lebanon, and is it possible to know the number of cases?

[Answer] Three new cases have occurred, bringing the total to 18 in all of Lebanon. The three new cases occurred as follows: one case in Zahlah, one in Tyre in the Rafidiyah camp and one in Beirut.

[Question] Several newspapers have reported that two deaths have occurred in Tyre and a third in Wadi Khalid. Is this correct?

[Answer] We learned of these cases through the newspapers, so we made the necessary contact with the International Red Cross, which conducted investigations in Tyre and informed us 2 days ago that the deaths which occurred did not result from cholera at all but from food poisoning. [end recording]

Beirut Domestic Service in Arabic 1230 GMT 19 Sep 77 NC

[Text] The director of health protection at the Public Health Ministry, Dr Muhammad Muhanna, has announced that two new cholera cases have been confirmed in Lebanon, bringing the total of confirmed cases to 26.

Beirut Domestic Service in Arabic 1230 GMT 20 Sep 77 NC

[Text] The director of health protection at the Health Ministry, Dr Muhammad Muhanna, has said that the laboratory of the American University and the central laboratory in Beirut reported at noon today that no cholera cases have appeared in Lebanon. Dr Muhanna added that the overall situation is satisfactory, thanks to the alertness of the citizens and their response to the appeals of the Health Ministry to follow its instructions on cleanliness.

MALAYSIA

Kuala Lumpur Domestic Service in English 1130 GMT 2 Sep 77 BK

[Text] The Sarawak State Medical Department is continuing its anticholera campaign to prevent the disease from spreading. So far, about 266,000 people have been vaccinated against the disease since its outbreak in April 1977. The number of confirmed cases remained at 158, including 5 dead.

Kuala Lumpur NEW SUNDAY TIMES in English 18 Sep 77 p 7 BK

[Excerpt] In Sabah, five more cases of cholera and one carrier have been detected since the first case was discovered in Kampung Ayer, Kota Kinabalu, last week. They are from Kampung Sembulan Lama, Kampung Sembulan Tengah, Kampung Lungkahang, Penampang; and Kampung Beaufort District.

Kuala Lumpur Domestic Service in English 1130 GMT 18 Sep 77 BK

[Text] The Kota Star district in Alor Star is to be declared a cholera infected area following the confirmation of the case and three carriers

of the disease. A 63-year-old man from Kampong (Tuk Tong) in Mukim Temenau died on 17 September. His wife and their 6-year-old nephew were admitted to hospital 10 days ago. Another person was also admitted. The state director of medical and health services said a campaign to check the spread of the disease was being intensified. Vaccination and chlorination of wells in the Kampongs were being carried out.

Kuala Belait BORNEO BULLETIN in English 20 Aug 77 p 1

[Text] Kuching--Sarawak's cholera outbreak has now lasted four months, with no sign of the end in sight.

To the contrary, cases have been rising steadily.

At the end of July the tally was 93. By last week's report it had reached 113. Now the figure stands at 131.

The outbreak is approaching the size of the protracted one that caused concern last year. It lasted almost six months, from the end of May to late November, with 165 cases.

There were three deaths; this year's outbreak has had four.

For the second week of this month, 18 new cases were recorded by medical officers, with 11 of them in the Sibu District, four in the Binatang District and one each at Julau and Kanowit.

The other was in Bintulu, where there had not been a case for five weeks. The outbreak started there in April.

More than 180,000 people have been vaccinated.

The outbreak, which has coincided with the dry weather, has presented problems for many people.

For instance, in Sarikei fruit sellers have been complaining about the poor sale of water melons.

People seem to think there is some link between melons and the disease. Even at 35 cents a kati, melons have been hard to sell.

NEPAL

Hong Kong AFP in English 0930 GMT 23 Sep 77 BK

[Text] Katmandu, Sept 23 (AFP)--At least seven persons died of cholera and 200 others were affected by the disease in the past 7 days at Dharan, 240 kilometres (150 miles) south east of Katmandu, it was reported here today. The report said all the educational institutions and local restaurants were closed so that the infectious disease might not affect more people.

The cholera has so far affected the three densely populated areas of Bujayapur, Gopama and Dharan, trade centres for the eastern Nepal hilly regions. The cholera victims are being treated at the British Gurkha recruitment centre hospital at Dharan. Doctors from Biratnagar and Red Cross volunteers have been aiding the British Gurkha hospital to combat the disease.

Last month sporadic cases of cholera in the urban areas of Katmandu were also reported, but only a couple of people died.

NETHERLANDS

Warsaw TRYBUNA LUDU in Polish 17-18 Sep 77 p 2

[Text] The Hague (PAP)--In Holland three cases of cholera have already been registered. The disease was brought in by a 60-year-old Turkish woman. Shortly afterward her husband and son became ill. All are in an isolation hospital in Nimegue.

SAUDI ARABIA

Riyadh SNA in Arabic 2230 GMT 11 Sep 77 NC

[Excerpts] Jidda, 11 Sep--The Health Ministry announced tonight that because of the presence of cholera cases in some neighboring countries, a cholera case entered the kingdom by way of the town of Khaybar, north of Medina, and as a result several other individual cases have appeared in the same area.

The ministry has stressed that the general health situation in the kingdom is under complete control.

SINGAPORE

Singapore Domestic Service in English 1130 GMT 8 Sep 77 BK

[Text] The Environment Ministry has confirmed another two cases of cholera. This brings the number of cases since the 31st of last month to three. In a statement today, the ministry said the two latest cases, both men, one aged 60 and the other 57, are now recovering at the (?Middleton) hospital.

SYRIA

Cairo MENA in Arabic 1348 GMT 28 Aug 77 NC

[Text] Damascus, 28 Aug--It was officially announced in Damascus today that the number of those who have died of cholera has reached 38 out of a total of 780 reported cholera cases. Syrian Minister of Health Dr Muhammad Madani al-Khiyami said that the Ibn Nufays Tuberculosis Hospital has now been set aside for cholera cases. The ministry has designated several other hospitals in various Syrian towns and provinces to handle cholera cases.

Damascus SANA in Arabic 1752 GMT 18 Sep 77 JN

[Excerpt] Damascus, 18 Sep--Some 57 new cases of cholera have appeared in the districts of Damascus, Aleppo, Latakia, Homs, Hama, Idlib, Ar-Raqqah and Dayr az-Zur. No cases were reported in other districts.

Damascus SANA in Arabic 1730 GMT 20 Sep 77 JN

[Excerpt] Damascus, 20 Sep--Some 43 new cholera cases appeared today in Damascus Governorate, Damascus, Aleppo, Latakia, Tartus, Homs, Hamah, Idlib, Ar-Raqqah and Day az-Zawr, compared to 40 cholera cases yesterday. A spokesman for the Technical Committee on the Combat of Cholera asserted that no deaths have occurred for the last 3 days.

TURKEY

Istanbul CUMHURIYET in Turkish 24 Aug 77 pp 1, 9

[Excerpts] Cumhuriyet News Center--While an intestinal infection is reaching epidemic proportions in various areas of the country, the Ministry of Health and Social Assistance maintains that "there is no cholera

epidemic in Turkey." In spite of this announcement by the ministry, three cases of cholera have been reported within the past 3 days at the Ankara Medical Faculty Hospital.

Ankara Chamber of Medicine Executive Board member Dr Yakub Hindistan suggested that "14 persons who died in southeastern Anatolia may have died of cholera," and said, "The Health Ministry takes a political stance. If there were a cholera epidemic in Turkey, it would conceal the fact."

In Istanbul, it was reported that many patients suffering from various intestinal infections observed in the villages of Bakirkoy in particular are being treated at the SSK [Social Security Organization] and Tropical Diseases Hospitals. It is being said in Kocasinan that the illness is caused by sewer seepage into the drinking water and is spreading in spite of an inoculation campaign.

Health and Social Assistance Minister, Nationalist Action Party member Cengiz Gokcek said in Gaziantep that there is cholera in Syria. Two persons on the Syrian border have died of cholera and the necessary safety measures have been initiated at the border gates.

The following reports developed yesterday:

Ankara: According to reports from our Ankara bureau, it has been put forward that the "intestinal infection" observed recently in Ankara and other regions in Turkey is in fact cholera, and three cholera patients were reportedly admitted to the Ankara Medical Faculty in the past 3 days.

Despite denials of a "cholera epidemic" by Health Ministry officials, authorities at the Ankara Medical Faculty say that cholera has been observed and have announced that preventive measures must be taken.

The increasing cases of intestinal infection and diarrhea in Ankara and certain eastern provinces are prompting authorities to concentrate on the possibility of an epidemic disease with the goal of diagnosing this disease. Patients coming for treatment to the infectious diseases department of the Medical Faculty in the past 3 days had similar complaints and were diagnosed as having cholera. Officials announced that cholera is "a fatal disease" which appears in the summer owing to sanitation difficulties. It is suggested that drinking water be boiled and fruits washed before eating.

Although Ankara Medical Faculty authorities have claimed "cholera," Health Ministry authorities deny this and say that they "have not been notified by this hospital."

Chamber of Medicine Claim

Moreover, Ankara Chamber of Medicine Executive Board member Dr Yakup Hindistan has said that the Health Ministry is taking a political stance

and would conceal the fact if there were a cholera epidemic in Turkey. He said that 14 persons who died in southeastern Anatolia may have died of cholera. According to an Ankara Agency report, Dr Hindistan, stating that Ankara Numune Hospital was filled with intestinal infection patients, said the following:

"We cannot definitely diagnose these cases as cholera. We have no proof that they are cholera. However, neither is it possible for us to say definitely that there is no cholera in Turkey. As you know, a cholera epidemic has appeared in Syria and the world has been informed of this. The possibility exists of the epidemic spreading from Syria to our country. In fact, there is a possibility that the 14 people who died in southeastern Anatolia died of cholera."

"No Massive Epidemic"

Officials of various health institutions to whom we have put this question have said that "it would be possible to find isolated cases of cholera" in certain places, including Ankara, as a seasonal thing, but that there was no epidemic. One of these officials said the following:

"Turkey has not been completely free of cholera since 1971-1972, when it was widespread. However, it has not had a chance to spread because of measures taken to combat it, and there have been no massive epidemics. Most of the gastroenteritis (digestive system infection) patients in the contagious diseases clinics of our hospitals today could very well have cholera. This happens almost every year during the summer, especially in regions where water is scarce, but it disappears without showing a disposition to spread and without turning into a major epidemic because of the precautions taken."

Ministry Counselor

Health and Social Assistance Ministry Counselor Osman Yasar said that there is currently an epidemic of acute intestinal infection in Turkey. "This is a summer disease," he said. "It definitely is not cholera."

Yasar said that precautions had been taken on our borders because of the cholera among our neighbors, and with respect to the intestinal infection, spoke as follows:

"Acute intestinal infections are contracted only by ingestion. Water and liquids containing water are ingested as food and drink. Prevention is directed toward these two factors. Water is being chlorinated. We are helping the municipalities with organized installations to do this. If the municipalities do not have organized installations, we help through other methods. Chlorine is sometimes deficient also because of defects in substructure systems. In that case we repair using calcium chloride or some other chlorine substitute. We are trying to avoid disruptions of service."

Dr Osman Yasar explained that water is cut off when electric power is cut and that sewage contaminants seep into the water system where breaks exist during these periods of negative pressure in the pipes. "There have been fatalities caused by intestinal infections," he said, "but they have been associated with pesticides on certain foods. Foods must be washed thoroughly with chlorinated water. Everything to be eaten must be cooked to boiling. We suggest that water be boiled also as an extra precaution."

The report in an Istanbul newspaper that "the presence of cholera in Turkey was reported to the WHO by the organization's representative in Turkey" has been denied. The organization's Turkey representative said that no notice had come to them about cholera either in Turkey or Syria and that this report was false. In fact, Health Ministry Counselor Yasar said the following about this:

"False reports have been attributed to the WHO representative in Turkey. He came to me this morning very upset. I told him not to worry."

Syria and Kahramanmaras

According to Ankara Agency reports based on MEM [expansion unknown], there have been deaths caused by cholera in a Syrian border village and in Kahramanmaras. Reports from Nusaybin are that two persons died in Tenuri village in Syria's Haseki Province and in Hamude in Kamisli District, that tight security is in effect at the Syrian border gate, and that the deputy district officer is conducting health inspections at the border gate.

A woman named Hayriye Karaman who, according to members of the Karaman family, became ill with an intestinal infection at her home on Sehit Asik Mustafa Street in the Kayabasi quarter of Kahramanmaras was taken immediately to Adana Hospital with a diagnosis of cholera and died there. Members of the family said that Hayriye Karaman's body was not turned over to them because hospital officials said she had cholera and her body would be cremated.

Gaziantep

Health and Social Assistance Minister Cengiz Gokcek, who has been in Gaziantep for some time for investigations concerning the ministry said in a meeting with office directors yesterday that there was cholera in Syria and that the necessary precautions had been taken to prevent spread of the disease to Gaziantep, which is closest to Syria, during the pilgrimage season. According to our Gaziantep correspondent, Gokcek announced that very few cases of intestinal infection have occurred in Gaziantep and requested that necessary precautions be taken immediately and that citizens who get the disease receive priority treatment.

Adana

Health Director Dr Nevzat Arman announced that cases of intestinal infection seen in Adana in recent weeks have not been contagious. Arman, who reported that samples from about 30 patients hospitalized with intestinal infections were analyzed in Adana and Ankara, said, "It seems that the illness seen in our area is not contagious. This is good news."

Officials in Cukurova announced that the haphazard and large-volume use of agricultural chemicals has disrupted the balance of nature. They said: "In addition to the damage done by agricultural chemicals, they also destroy beneficial insects. The result is that the balance of nature is disrupted and new types of harmful insects appear. Some of these new types of harmful insects gain immunity or resistance to the chemicals. One of the chemical-resistant insects in our region is the malaria mosquito. It will be impossible to eliminate the malaria-carrying mosquito or greatly reduce its breeding until a new, effective means to combat it is found."

Istanbul

Various intestinal infections occurring in the villages of Bakirkoy in Istanbul and especially in Kocasinan and Bayrampasa accounted for a significant rise in patient numbers in the SSK hospitals and the Tropical Diseases Hospital.

Authorities have said that sewage seepage into drinking water a month ago was a significant factor in the intestinal infection, but that the inoculations and medications given within the month had reduced the effect of the disease. However, the patient numbers are still swollen because after the disease became known among the public, people who just had diarrhea from overeating have gone to the hospitals out of fear.

Officials said that tests were run on incoming patients, that intestinal infections were found in some, but definitely no cholera, and that they did not have the authority to make any statement about the types of intestinal infection.

Only people living in areas with poor sanitation conditions have said they were afraid of contracting "cholera." "Precautions taken are insufficient. Life is disrupted. If water flows at all, it is filthy. A vaccination campaign is in progress. We are uncertain, however, how it will protect us from contagious disease," they said.

The people, moreover, are afraid that the multiple deaths in the area were caused by typhoid. However, health authorities said that the deaths resulted from other diseases, and confirmed only one death from typhoid in Kocasinan.

Some municipal authorities and doctors have made statements in this connection, saying that cholera would be possible in areas with these poor conditions. "The people must know how to protect themselves. Cholera and any type of disease might be seen in these areas. But our people have become immune to the diseases from being in contact with the bacteria," they said.

Admonishing the public not to panic, authorities suggested that they be careful of drinking water and food, and thoroughly wash fruits and vegetables in clean water. They further called for inspections of drinking water and repair of the underground installations in the area.

Vaccinations in Istanbul

A vaccination campaign is in progress in five separate areas to combat the outbreak of intestinal infection in the Bakirkoy-Kocasinan region. However, vaccinations of hundreds of citizens were postponed when supplies of vaccine ran short at the provincial health office, and there were many complaints about this.

Employees at the health centers asked people who were already in line to come back the next day. One group of people attracted attention by refusing to be vaccinated because of Ramazan.

Kocasinan Mayor Ali Yerlikaya said that the nature of the infectious disease had not been determined yet, that they had received no official notification from the provincial health office. Yerlikaya said that mud and sewer wastes had gotten mixed in the drinking water in the area and that it would cost 3,750,000 liras to purify the water in the region. "We have made numerous personal applications to the Health and Public Works and Housing Ministries to obtain this money from the state. However, we have received no notification that it would be provided," he said.

Drug Shortage

Intestinal infections, on which summer water shortages are known to have a major effect, make great demands on the drug producers' supplies of the antibiotics used in treating these diseases. Because the same types of antibiotics are used in the treatment of all intestinal infections from the simplest to cholera, typhoid and paratyphoid, the distribution of the drugs to all areas where disease occurs increases tremendously, even if the cause of disease is different. We learned from drug company officials that the demand for these antibiotics has increased most in the provinces of Diyarbakir and Malatya. Demand in Erzurum also has suddenly shot up. In Istanbul, demand for these drugs from pharmacists has increased most in the Kocasinan and Bayrampasa areas. Also, use of these antibiotics at the SSK hospitals has risen dramatically. Drug companies are shifting production to meet the growing demand. At present, it is reported that there is no antibiotic shortage.

Istanbul CUMHURIYET in Turkish 27 Aug 77 pp 1, 9

[Text] Cumhuriyet News Center--The cholera debate continued yesterday with Prime Minister Demirel and Health Minister Gokcek saying of the rampant disease that "there has been no death from cholera or related diseases," while TUS-DER [Comprehensive Health Personnel Unity and Solidarity Association] General Chairman Mavi said that of 500 cases submitted to laboratory tests in Ankara, 150 were diagnosed as cholera.

Cholera Claim

According to a report from our Ankara bureau, TUS-DER General Chairman Hasan Fehmi Mavi, who called a press conference yesterday, said that cases of cholera had been observed in Ankara in Demetevler, Akdere, Turkozu, Seyranbaglari, Ayas, Bagcilar, Mutlu, Varlik, and Sereflikochisar, that Vibrio cholera was found in city water in Esenler, and that patients were being treated at the Medical Faculty, Numune Dr Sami Ulus, and the SSK hospitals.

At the press conference, Mavi made the following statement about cholera and other epidemic diseases:

"The contagious intestinal infections, such as infectious malaria, typhoid, dysentery, and cholera, that we are experiencing in our country today have been around for years and cause thousands of deaths each year.

"The type of cholera which has been spoken of in the press recently is the ogava type. It is currently widespread in eastern, southeastern, and central Anatolia, and epidemic in Istanbul. It is less fatal than eltoria, another kind of cholera. According to information we obtained, tests were run on over 500 cases in Ankara alone, of which 30 percent were diagnosed as cholera.

"Cholera has been seen more among very young children this year, and for this reason the fatality rate is expected to be higher than in past years.

"In addition to this disease, infectious malaria and typhoid are occurring frequently, and acute intestinal infections are presenting a great threat to the people of our country.

"The appearance in the large cities in recent years of epidemic diseases which in the past were confined to small settlements, the inability of the cities to obtain the working resources needed for maintaining substructure services and environmental health, and the inadequacy and breakdown of substructure services such as water mains and sewage systems contribute to epidemic diseases. Thus the public health is endangered by political obstacles to the provision of adequate city services."

Ozdemir Proposes Question

Elsewhere, Sivas RPP national deputy Mahmut Ozdemir presented to the assembly chairman yesterday a bill of question to be answered by the minister of health, in which he said that a cholera epidemic was raging in and around Sivas in which 15 persons had died of the disease within 3 days in the village of Yigitler and called on the minister to answer the following questions:

1. Have health teams been sent to Yigitler and other villages in Sivas-Yildizeli?

2. Has the cause of death been definitely determined in the cases of the 15 persons who died within 3 days in the village of Yigitler? What anti-epidemic measures have been taken in this village?

3. Have definite diagnoses been made in the suspect cases of more than 50 patients at Sivas Numune Hospital? The lives of these patients are endangered by the inadequacy of this hospital; is their transfer to other hospitals or some other precaution under consideration?

4. Is it true that this epidemic is raging in five separate villages in the Sivas jurisdiction?

5. Have drugs, equipment, and doctors been placed at the disposal of the province for the other cases of the same type that were reported to your ministry by the Sivas health director?

Demirel Statement

According to reports from our Istanbul News Service, Prime Minister Suleyman Demirel came to Istanbul yesterday to give information on the outbreak of epidemic diseases in Ankara and Istanbul. Demirel said, "These diseases are not cholera. My colleague, the minister of health, also told the Council of Ministers yesterday that these diseases are not cholera. They are intestinal infections caused by hot weather and non-chlorinated water. Nonchlorinated water is known to cause intestinal infections. Many people become ill under crowded circumstances in hot weather. It is not cholera."

According to the Health Minister

Minister of Health and Social Assistance Cengiz Gokcek, who was in Istanbul for the opening ceremonies of the "halfway house" and "protected work place" facilities at the Bakirkoy Emotional and Nervous Diseases Hospital, said in a meeting with members of the press that there was no cholera in our country. The minister said that cholera had been observed in Syria and that the necessary precautions had been taken at Turkey's border with that country. Explaining that there is an outbreak of intestinal infection in our country,

Gokcek said, "There has been no case of or death by cholera in Turkey." The Istanbul regional health director spoke at the same press conference and said that there was "typhoid, paratyphoid, and diphtheria in Istanbul, with 53 cases and 1 death."

Health Minister Cengiz Gokcek, in Istanbul for the opening of two new facilities at the Bakirkoy Emotional and Nervous Diseases Hospital, while saying that there is no cholera in our country, added that claims of an outbreak of cholera were politically motivated. Gokcek, who said at the press conference that the absence of cholera in Turkey could be proved statistically, listed the following cases of intestinal infection:

"To refute the false opinion widespread in our country, I am pleased to announce that in 1971 there were 716 cases of intestinal infection and 46 deaths; in 1972, 498 cases and 21 deaths; in 1973, 844 cases and 17 deaths; in 1974, 509 cases and 9 deaths; in 1975, 18 cases and 2 deaths; and in 1976, 2,487 cases and 53 deaths. To date in 1977, there have been 563 cases of infection and 9 deaths. Up until 24 August in 1976, there had been only 725 cases and 12 deaths. What I want to show you by this is that there were 725 patients in the hospitals of our 12 provinces that year. This year we have 563 patients in our 17 provinces. These figures are not approximate. The diseases were analyzed and identified in the laboratories. The statistics show that the situation is no worse than in past years."

Stating that there was no cholera in our country, Gokcek said that it was necessary to investigate legally the closing of the Bulgarian borders, that the border gates could not be closed unless there was an official announcement from the WHO of the presence of cholera in Turkey. Gokcek added that cholera was present in Syria, our neighbor to the southeast and said, "We are not planning to close this border today; however, the necessary precautions have been taken at the hospitals in southeastern Anatolia."

Overland Pilgrimage May be Banned

Health Minister Cengiz Gokcek, indicating that overland pilgrimage may be banned in order to avoid the cholera in Syria, said: "We have taken every precaution at the hospitals on the border, but cholera is a disease that spreads rapidly. We may have to ban this route for citizens going on pilgrimage, but I cannot make a definite statement about this. It is, of course, a question involving the future of the 42 million. The overland pilgrimage route may have to be closed because of cholera. Pilgrims may have to go by air. The overland route will not be closed yet, but we are obliged to take precautions in every health-endangering situation."

No Cholera, Fatalities in Ankara

The health minister, who said reports that more than 50 children had died of cholera in Ankara were false, gave the following information, saying that it was based on official results given to him by the SSK:

"SSK official records say that the number of deaths in the children's clinics for 1976 and 1977 to 24 August was 46, and none was caused by cholera. This is a delicate subject. I have toured our southeastern provinces. Cholera is not present there, either. These are cases of intestinal infection. The Istanbul health director has a statement on this subject."

1 Death, 53 Occurrences

The health director stated that there was no incidence of cholera in Istanbul, that tests revealed typhoid, paratyphoid, and diphtheria. He said that the disease was an intestinal infection and added that the necessary precautions had been taken and care administered.

Situation in Istanbul

Intestinal infections are gradually increasing in Istanbul. Large numbers of patients with intestinal infections are coming to the Capa Medical Faculty Internal Diseases service. Officials have reported cases of typhoid among these patients.

Two more persons from the Kocasinan Cumhuriyet quarter were admitted to the hospital yesterday with the infection. The number of confirmed cases of typhoid is also reported to be increasing gradually. There are also a great many receiving home treatment for the disease.

Hasan Arslan, head man of the Cumhuriyet quarter, notified officials of the situation and requested assistance for the area. In the notice, Arslan told of the hardships and lack of water in the area. "Laborers and poor people live in Kocasinan. If we were wealthy, high-class people, our problems would be taken care of," he said.

Kucukkoy

In Kucukkoy in Istanbul, which is suffering a water shortage, the people have been told to wash fruits and vegetables before eating them and to boil drinking water. City officials announced that three artesian wells in the area had been chlorinated. However, the officials said they could give water to the people only once every 4 or 5 days because of the water shortage. For this reason, most of the people try to get standing water from buildings or any running water they can find.

In this connection, 12 passengers on an Ankara touring ship to the western Mediterranean cancelled their reservations because of the widespread intestinal infection. It was learned that these passengers postponed their trips until a later date.

Health officials have announced that preventive measures are being stepped up.

Wells Closed

Wells belonging to the Mahmutbey Water Union, which feeds extra water into the network from Bakirkoy to Halkali in Istanbul were found to be contaminated. Seven of the wells belonging to the union were closed by the Bakirkoy government doctor's office. Officials said that samples were being taken from the wells for tests and announced that the wells would be checked every day.

Precautions in Germany

It has been learned that Turks wishing to enter Federal Germany are not being allowed entry without certification of cholera vaccination. Authorities said they had adopted this procedure at the directive of the Federal German Health Ministry because of reports of a cholera epidemic in Turkey.

Istanbul CUMHURIYET in Turkish 27 Aug 77 pp 1, 9

[Text] Istanbul News Service--Experts are saying that the intestinal infections seen in Ankara, Istanbul, and especially the provinces of eastern and southeastern Anatolia are quite normal for Turkey's conditions. "As long as drinking water and sanitation conditions remain the same," they said, "there will be outbreaks of intestinal infections in Turkey whenever the weather is this hot and dry."

Pointing out that various intestinal infections, including typhoid, paratyphoid, and those called Vibrio cholera, occur with greater or lesser virulence almost every year at the same time in various provinces, the experts made the following statement in summary:

"Vibrio is the bacteria of a type of cholera. However, it is a less serious disease than cholera with respect to contagion and fatality. It is not as dangerous a disease as cholera, which can persist for years. It causes diarrhea and loss of fluids for a period of 3 days. Like other intestinal infections, it is treated with specific antibiotics, and with serum in advanced cases. It is fatal only to the very young, the very old, and the very weak, because of the extreme loss of fluids, unless treated early."

The experts said that, especially for Istanbul right now, typhoid was a much more serious problem than Vibrio cholera, which has been seen only occasionally. Their statement follows:

"In the poor ghetto areas, which have been without chlorinated healthful water for months, the people have had to use uninspected or spring water for bathing and even for washing foods, cooking, and drinking water. It is normal for various diseases, primarily intestinal infections, to break out at this time of the year as the result of using such water, most of which is contaminated by sewage.

"In addition to general precautions against an epidemic such as inoculation, medication, and going to the hospital or doctor at the first sign of illness, there are certain practical precautions that the people must take against an epidemic. First is to boil all water to be used for drinking or in the preparation of food. It is necessary to be cautious also of bottled water purchased elsewhere or even city water because of such problems as frequent water cut-offs leaving the pipes empty and allowing seepage. It is a good idea to boil this water also.

"Eating raw fruits and vegetables should be avoided insofar as possible, especially in epidemic areas. If fruits and vegetables are eaten raw, they must be washed with extreme care and salads liberally dressed with vinegar.

"Water for washing raw fruits and vegetables can be prepared by adding potassium permanganate, obtainable from the druggist, or a tablespoon of calcium chloride to a liter of water. Boric acid may also be used. Fresh fruits and vegetables washed in treated water, however, must be rinsed in pure water before eating.

"Of course, it is imperative to avoid any beverages, water, lemonade, or food sold in the open."

Istanbul MILLIYET in Turkish 24 Aug 77 p 10

[Text] A type of cholera characterized by severe intestinal infection has spread throughout the country at an alarming rate. The disease, which is normally found in the southeastern provinces of the country, has been discovered in Ankara. Thus far 50 children at the Diskapi Social Security Hospital's Children's Clinic in Ankara have reportedly succumbed to the disease. The report has been denied by the hospital's chief physician, Erdogan Yuce, although children afflicted with this disease have been found at the hospital.

Patients with acute intestinal infections were also noted at Hacettepe Hospital in Ankara. They have been admitted to the hospital's Etimesgut facilities. Nearly 30 cases were reported at that location.

The Health Ministry director for health affairs, Ertugrul Aker, noted that eight persons from the village of Scopi and six persons from the village of Silvan have died from the disease.

One cause of the rapid spread of this disease has been tied to the power shortage. Water system pumps are run by electricity and because of the power cutbacks "reverse pressure" has been created in the water system's pipes. As a result filthy water and sewage has leaked into the drinking water system. Although there are medicinal means for combating the spread of this disease, the authorities claim it is spreading because of environmental conditions.

Nicosia Domestic Service in English 1830 GMT 25 Aug 77 NC

[Excerpt] The mayor of Ankara, Mr Dalokay, told a news conference today that a cholera outbreak in the city has so far claimed the lives of 34 children. The mayor accused the government of hiding the truth from the people for fear they might panic.

Newspaper reports of cholera in Ankara and other Turkish cities were denied yesterday by the Turkish Health Ministry. It said an acute intestinal infection was responsible for the reported death of 66 people in various parts of the country.

Ankara Domestic Service in Turkish 1800 GMT 25 Aug 77 TA

[Excerpt] It is reported that Bulgaria and Greece have taken measures at the crossing points at the Turkish border on grounds that contagious intestinal infection cases have been observed in Turkey.

According to information obtained by a TRT correspondent, Bulgaria has stopped granting residence visas to those arriving from Turkey. Transit passage through Bulgaria is permitted under the condition that transit is limited to 12 hours.

An announcement by the Foreign Ministry Information Directorate General on the issue says that representations based on information obtained by the Ministry of Health and Social Welfare have been made to the Bulgarian Embassy in Ankara to eliminate these measures.

Istanbul POLITIKA in Turkish 26 Aug 77 p 4

[Excerpts] Ankara (Turkish News Agency)--Health Minister Gunduz Gokcek has stated that recent newspaper reports to the effect that there is a cholera epidemic in the country and that a great many citizens have died from this disease--are very misleading. He added that the deaths had been caused by an intestinal infection, which seems to be considerably more prevalent this year than in the past.

Istanbul POLITIKA in Turkish 26 Aug 77 p 4

[Excerpts] Ankara (Istanbul Agency)--Ankara Mayor Vedat Dalokay has noted that an outbreak of cholera has begun in Ankara, and that a total of 34 small children have died from this disease within the past 10 days. He further asserted that the governor of Ankara has hidden the real situation from the public.

Istanbul POLITIKA in Turkish 26 Aug 77 p 4

[Excerpts] Istanbul (Istanbul Agency)--Abdullah Demirtas recently applied to the emergency room of the Internal Diseases Department of Istanbul's Guraba Hospital, where an examination disclosed that he had cholera. He was transferred to the Bakirkoy Tropical Diseases Hospital where it was determined by Dr Nazmi Kocur of the Istanbul Health Directorate, that he was not suffering from cholera, and asserted that there was no cholera in Istanbul. Doctors who treated Abdullah Demirtas at the Tropical Diseases Hospital said that he had suffered from a continuous fever, was unable to stand, had bloody diarrhea, and ate lemons continuously.

Warsaw TRYBUNA LUDU in Polish 31 Aug 77 p 2

[Excerpt] According to information imparted to the PAP correspondent by the Turkish consul in Sofia, individual cases of cholera were noted in Turkey, in connection with which an epidemic has not yet been announced in that country.

Istanbul POLITIKA in Turkish 6 Sep 77 p 8

[Excerpts] Various intestinal diseases including typhoid and cholera have become widespread in our country, and the government authorities are denying their existence. Nevertheless many deaths, particularly among children, have occurred, and are continuing. Causes for these diseases include matters such as deprived living conditions, filth, inadequate health facilities and preventive measures, lack of medicine, and ignorance. Mothers are urged to take extraordinary measures to protect their children, and must apply to a doctor at the first sign of disease. [The symptoms of cholera and typhoid are given in detail as well as the treatment for these diseases.]

Istanbul POLITIKA in Turkish 11 Sep 77 p 5

[Excerpts] Van (THA)--Suphi Turkoglu, provincial chairman of the RPP organization in Van, has asserted that Van Municipality and other interested spokesmen are denying the existence of the cholera outbreak which has occurred in Van and vicinity. He noted further that approximately 10 persons have died in villages of Caldiran subdistrict, Muradiye district, Van, that several of these villages have been cordoned off, and that the public is being deceived by being told that these deaths are a result of an intestinal infection.

Istanbul HURRIYET in Turkish 11 Sep 77 p 3

[Text] Kilis [Gaziantep Province] (HHA)--As a result of the spread of cholera in certain Arab countries, and particularly in Syria, an order has been issued forbidding the import into Turkey of any foodstuffs from Arab countries.

Istanbul POLITIKA in Turkish 15 Sep 77 p 1

[Excerpts] Manisa (ISTA)--Although local officials have denied the existence of cholera in Manisa, terming the outbreak as "an acute intestinal infection," there is evidence to support the belief that this is cholera. It is further noted that five patients at the mental hospital in Manisa have reportedly died from cholera. Senator Niyazi Unsal from Erzincan (RPP) and Senator Hasan Fehmi Gunes from Sakarya (RPP) have asserted that there is an outbreak of cholera in Basegmez village of Caldirgan, and that five persons died from this disease during 1 day.

Istanbul AKSAM in Turkish 18 Sep 77 pp 1, 7

[Excerpts] Izmir (THA)--It is reported that intestinal infection has recently caused the deaths of five individuals in the Cay quarter of Izmir, and that two police officers in Sirinyerde have had symptoms of cholera and have been hospitalized. The outbreak of intestinal infection has been termed "cholera" by the Izmir Chamber of Physicians, and the two police officers are currently being treated in the Tepecik Thoracic Diseases Hospital. Mayor Alyanak noted that although it was requested that improvements be made to eight large streams emptying into Izmir Bay, the National Front government has thwarted local efforts to carry out these much needed health measures.

Ankara Domestic Service in Turkish 1000 GMT 28 Sep 77 TA

[Summary] The Supreme Health Council has decided to recommend to the government that pilgrimages to Mecca and group tours abroad be banned because of the cholera epidemic in some of the neighboring countries. The decision, which was adopted last night, will be discussed by the Council of Ministers tomorrow and if approved will go into effect.

A statement issued by the Supreme Health Council today says that the cholera epidemic in the Middle East and in some of the neighboring countries is likely to spread to Turkey, too, if the necessary measures are not adopted. It calls for more effective and coordinated work by health services to prevent the spread of cholera and the outbreak of a cholera epidemic in Turkey.

The statement also says that the health council also discussed the malaria issue. It says the council noted that malaria cases in Turkey increased over the past 3 years and this is cause for concern. More personnel should be recruited to combat the disease, the statement said.

VENEZUELA

Caracas ULTIMAS NOTICIAS in Spanish 26 Aug 77 p 36

[Article by Ricardo Marquez]

[Text] The Ministry of Health and Social Welfare has intensified epidemiological watchfulness in view of the news of outbreaks of cholera in Turkey.

According to information furnished by the director of public health of the SAS, Dr Jose Manuel Padilla Lepage, up to now neither the Pan-American Health Bureau nor WHO has provided information on the supposed outbreak of cholera in Turkey.

But, in view of international press reports, vigilance was ordered intensified in ports and airports. Strict prevention and control measures have been set up.

The following are outstanding among the measures being applied: issuance of a card to travelers coming from infected countries so that, at the first symptom of gastrointestinal distress they will go to a physician with the card; the address of those travelers is taken and the regional authorities are informed of their residence so that they may watch them for a certain amount of the normal incubation time of the disease.

WEST GERMANY

Hamburg DPA in German 0919 GMT 11 Sep 77 LD

[Excerpt] Reutlingen/Stuttgard--The cholera epidemic in the Middle East now seems to have led to the first illness in the Federal Republic. The Baden-Wuerrtemberg Social Ministry today stated that in Reutlingen a man was, "according to examinations so far, suffering from cholera." The man in question was a long-distance truck driver who had been in Iraq at the end of August and had returned via Turkey to the Federal Republic. The case was, then, connected with the cases of cholera that have been occurring for some time in the Middle East.

II. HUMAN DISEASES

ARGENTINA

PSITTACOSIS OUTBREAK

Buenos Aires LA RAZON in Spanish 13 Aug 77 p 3

[Text] The State Secretariat of Public Health announced yesterday that, "In view of the incidence of some cases of psittacosis in the federal capital, the symptoms, method of transmission and preventive measures are being made public in order to prevent the possible transmission of the disease." The report states that the disease "starts abruptly, characterized by fever, headache, cough, lack of appetite and profound weakness. In general, human infection follows a benign course. The occurrence of the disease," the report states, "takes the form of sporadic cases or breakouts in families among persons exposed to parrots, parakeets, doves, turkeys and other sick birds or those which appear to be healthy. The infection is generally contracted by inhaling the infecting agent coming from the dried excrement of infected birds in enclosed spaces." Finally, the public health report indicated that "treatment of persons with effective antibiotics should be prolonged for a week after the disappearance of fever. Infected birds should be treated or eliminated and places where they lived should not be used by humans until they have been adequately cleaned and ventilated."

Buenos Aires LA NACION in Spanish 8 Sep 77 p 14

[Text] At a meeting chaired by the assistant secretary of public health, captain naval medical service, Dr Alfonso Julio Maillie, a survey was made of the psittacosis epidemic, an illness common in parrots, parakeets, linnets, canaries and other smaller fowl, which has broken out in Buenos Aires and in other inland cities.

During the meeting, at which were also present representatives of other organizations connected with this particular subject, measures of control

were resolved upon as well as the coordination of operations among health organizations in different districts and the publishing of recommendations for the treatment and prevention of the disease.

In an official communication, attention is called to the fact that psittacosis is a disease that is sometimes transmitted to man in whom it causes respiratory complications of varying degrees of seriousness.

They advised the people "to avoid direct contact with birds belonging to the above-mentioned species, particularly when they manifest symptoms of illness and any respiratory difficulty" and also "the slaughter and incineration of sick animals; to prevent children from playing with birds and other fowl which they may come across in the street, especially if they manifest difficulty in flying."

Owners and persons in charge of bird stores or other places where birds are kept, are advised to take special pains with hygienic measures and to consult professional veterinarians or health authorities regarding the procedures recommended with respect to both healthy and sick animals.

Buenos Aires LA PRENSA in Spanish 9 Sep 77 p 5

[Text] Positive cases of psittacosis, at present on the increase, have reached 59, according to information received at the end of the third meeting held at the assistant secretary's office to discuss the outbreak of the disease, the epidemiological situation, supervisory measures and control in carrying them out.

According to information given, the cases reported are: in the capital, 12; La Plata, 9; Mar del Plata, 4; Gerli, 5; Moron, 4; Lanus, Moreno, Pergamino, El Palomar and Mendoza, a total of 10, and 13 in various sections of the country. [numbers as published] The cases made known this year up to the present number 180 of which 61 are in the capital; 113 in the province of Buenos Aires; 2 in Mendoza; 1 in Santa Fe and 3 in various sections of the country.

The first confirmed center of infection was at the Indonesian Embassy, in the capital, where of some 12 persons examined 6 proved to be ill and 6 suspected of infection.

The 59 cases now officially recorded were checked by means of laboratory tests and the examination of complement fixation. For the first time in the country, children believed to be immune, have been attacked by zoonosis. In all, there are six cases of children attacked by the disease: two 4-year-old children, one 5-year old, one 9-year old, one 10-year old and one 14-year old.

The meeting held had as its objective to coordinate the measures in Greater Buenos Aires, the supervision of commercial establishments and the launching

of a campaign to enlighten public opinion regarding the contagion and prophylaxis for this specific zoonosis. In the inspections undertaken in commercial establishments, 17 cases involving birds were verified, including among those infected 8 parrots and parakeets, 3 canaries, 2 cardinals, 2 linnets and 2 black heads.

During the meeting, they did not minimize the importance of the outbreak--as they said--but did not look upon it as serious and found it fully under control.

RIGOROUS CAMPAIGN TO BE WAGED AGAINST CHAGAS DISEASE

Buenos Aires LA NACION in Spanish 19 Aug 77 p 12

[Text] San Miguel del Tucuman--The supervisor of the national service in the fight against Chagas-Mazza disease, Col Carlos Romanella, declared that, "In a large part of the country endemic Chagas reached dramatic proportions. It is estimated that 23 percent of the population is affected. This has brought about the preparation of an aggressive campaign which seeks to control the disease in 5 years."

He affirmed that Chagas disease is the number one national health problem, and as a result 20 provinces have been declared to be in a state of emergency for health in order to combat the vinchuca insect which is the carrier of the disease.

The national anti-Chagas program will not only include the provinces in a simultaneous, coordinated, continuous and contiguous manner, but also, through agreements, be extended to neighboring countries which suffer from the scourge.

Colonel Romanella expected the nation to put forth a great effort in the campaign in the form of equipment, personnel, laboratories and vehicles. The distant provinces will contribute according to their abilities.

He requested, at the same time, the cooperation of the population, which is indispensable in successfully carrying out the projected actions. Everyone should understand what the disease is and how it is fought in all its aspects. Chagas disease is not incurable and no one is immune to it.

In order to fight the vinchuca insect, the head of the national service said that approximately 2,700,000 dwellings would be sprayed with insecticide.

A New Study

A group of scientists from the United States, headed by Dr Richard Stewart, proposed to the secretary of public health, medical vice admiral Manuel I.

Campo, that a large study of Chagas-Mazza disease be carried out in the area of Cruz del Eje, Cordoba, with the inclusion of entomological, demographical and ecological aspects. Among other aspects, the proposed project includes the development of new methods of controlling the vector, such as using simple paper traps; the selective application of insecticide against the vinchuca insect in places where it is found instead of a complete spraying of dwellings; use of low cost repellents within the reach of the population with scarce resources and other possibilities which might develop from the studies.

If the Argentine Government agrees, the studies could begin within 6 months. It is projected that they would take place over a period of 5 years, and it is estimated that results would begin to show after 2 years of activity. The proposal includes the formation of a committee in Cruz del Eje composed of citizens and doctors of the area to control the work.

FIRST CASE OF CANINE BRUCELLOSIS DETECTED

Buenos Aires LA NACION in Spanish 19 Aug 77 p 9

[Text] Cordoba--Cordoba inspectors detected the first case of canine brucellosis registered in the country when a sick person in the province of Neuquen was treated.

The illness was transmitted by a dog of the Dogo Argentine breed, belonging to the patient. The characteristics of the illness are similar to other cases of brucellosis which affect humans. The illness is responsive to treatment with tetracillin; it results in abortive seizures or death after 40 to 50 days of gestation. This disease which has antecedents in the United States, where it was discovered in 1968, and in Japan, Germany and Brazil, was contracted by the affected woman when she handled the remains of a miscarriage suffered by her dog.

The virus was isolated by the team headed by Dr Felix Ramaciotti, former head of the central laboratory of the Secretariat of Public Health of the province, who indicated that treatment given to the sick woman was producing favorable results.

MEASLES OUTBREAK AND IMMUNIZATION CAMPAIGNS

Buenos Aires LA NACION in Spanish 22 Aug 77 p 5

[Excerpt] From today until Saturday a measles immunization campaign organized by the secretary of state for public health will be underway in this capital. The vaccination, which is free and obligatory, will include children between 9 months and 4 years of age, inclusive. The immunization plan will be carried out by the health authorities of the city of Buenos Aires and by the Buenos Aires government.

Buenos Aires LA NACION in Spanish 26 Aug 77 p 10

[Text] "There is very good reason for people to concern themselves with having their children vaccinated against measles," said the assistant secretary of public health medicine, Dr Maillie, in a press conference, "but not to the point of becoming alarmed. Medicine has progressed a great deal. Today we have antibiotics and procedures are much better known. Nevertheless, there are fatal cases, especially in the outskirts of the city where the children do not have good nutrition or have serious illnesses. It is not right that children should die of measles, and I think no one should die. If only one dies, it is too many."

This is what he said when the reporters interviewed him regarding the fatal cases of measles. He revealed that only six were dead and they did not occur in the last few hours. "Nothing has happened in the last 2 months," he stated, "which would support alarming reports disseminated previously. Next week we will be able to give reliable data."

The death of the six children has led to the acceleration of the anti-measles operation in the federal capital and in Greater Buenos Aires.

Dr Maillie stated that the people are not responding to the announcement of the health authorities, since attendance is poor. "It is not as great as we expected since up to yesterday 3,000 were being vaccinated in the federal capital daily, and in the province of Buenos Aires it is not much more."

He revealed that "measles does not kill by itself but kills frequently by means of bronchopulmonary complications. The disease produces a strong virus attack on the respiratory system and this permits certain bacteria, known as 'opportunists,' or transferable bacteria, to add a bacterial attack to that of measles, which develop bronchopneumonias. At times measles acts to produce lesions at the nervous system level, resulting in serious, mortal encephalitis or neurological lesions, and on analysis later it is found that the child had some deficiency or some problem that was unnoticed at the time.

"The vaccination program," he said, "will last until 2 September," and he emphasized that "the vaccinated child has good defenses because the vaccine is very effective."

Buenos Aires LA PRENSA in Spanish 30 Aug 77 p 5

[Text] Rosario, Santa Fe--The outbreak of measles in this city and in the southern part of the province continues to be serious. The disease has attained an above-normal intensity this year, and the number of sick is very high. According to sources close to various medical institutions, the number of those affected to date is over 300, and there have been 29

fatal cases so far this year. Treatment of the sick is centered in the Victor J. Vilela Children's Hospital because the disease principally affects children. Although he did not present official figures, the secretary of public health of the city, Dr Roberto Sanchez Ordonez, admitted his concern about the outbreak and recalled that with the exception of 1972, a systematic antimeasles campaign has not been carried out in recent years. He also stated that in view of the facts the municipal health authorities have decided to proceed with an intensive vaccination effort. The first stage will cover the school population, especially in the poor areas, said Dr Sanchez Ordonez, because the disease principally affects undernourished children in places where hygienic conditions are minimal and in addition in those areas where preventive vaccination has not been carried out.

Buenos Aires LA PRENSA in Spanish 6 Sep 77 p 6

[Text] At a press conference, the assistant secretary of public health, Dr Oscar Alberto Ottonelo, made it known that last February an epidemic outbreak of measles, especially among young children, flared up in the city of Zapala and spread throughout the province. It is calculated that 396 cases have been recorded so far, 153 of which were in the above-mentioned city, with 3 deaths.

He added that the epidemic has been slowing down and that in March a vaccination campaign had been launched on the provincial level, with 3,500 doses of vaccine administered to those children from 6 months to 5 years of age who had not been vaccinated. He explained that they had anticipated giving 7,000 doses of vaccine but that, unfortunately, the people had not responded to the authorities' appeal and added that the doses needed for administration on a large scale were always on hand.

In regard to the number of cases that appear annually, he stated that the average total normally reaches 150 throughout the province.

No Sabin Vaccine

In response to a question asked him, Dr Ottonelo replied that there has been no Sabin vaccine in the province since last 4 August despite their previous request for a supply made to the proper agencies.

Campaign in Cordoba

An antimeasles vaccination campaign, conducted by the provincial executive authorities through the Ministry of Social Welfare, began yesterday throughout the province.

The first part of this program is to be intensive and will last until the 9th, while a coordinating stage will be carried out from the 12th to the 16th.

In Chaco

Beginning yesterday and continuing until next Saturday, an antimeasles vaccine campaign will be carried out throughout the entire province for children from 9 months to 5 years of age. The announcement was made yesterday at a press conference by Dr Amilcar R. Urrutia, minister of social action, Dr Hector H. Schanton, secretary of public health, and other local officials. It is calculated that during these days, some 15,000 children will be immunized, that is, 75 percent of the vulnerable provincial population. At this same meeting, the authorities made it known that the immunization program is to be carried out for the remainder of the year throughout the province.

National Antimeasles Campaign Continues

The Ministry of Social Welfare announced that it will continue to carry out the national antimeasles vaccination campaign throughout the country with the exception of Mendoza Province where it will be launched on the 12th of this month. Vaccinations will be given in all municipal hospitals and at those branches equipped for this purpose, to all children from 9 months to 4 years of age completed, who have not been previously vaccinated.

Parents and those responsible for children within these ages are reminded that they are to take them to the nearest social welfare center for compulsory vaccination.

The state secretary of public health did not make known the date to which the above-mentioned campaign would be prolonged.

HEMORRHAGIC FEVER

Buenos Aires LA NACION in Spanish 24 Aug 77 p 3

[Text] Rosario--Reports from Santa Teresa, Constitution Department, Santa Fe, say that in an area where cases of hemorrhagic fever have been recorded in the past another case occurred yesterday. The victim, according to the report, was a local farmer named Domingo Castelleta, who died while being treated for the disease. Other information permits us to report, in addition, that new cases have appeared in the Department of Rosario, which fortunately have been controlled by the health authorities.

MAJOR GASTROENTERITIS OUTBREAK

Melbourne THE AGE in English 20 Jul 77 p 1

[Text] The Federal Government yesterday issued an international alert to warn countries that milk powder imported from Australia may be contaminated.

It has also banned further exports until all contaminated milk has been withdrawn.

The three companies which produce the four suspect brands--Lactogen, Enfamil, Sobee and Similac--have begun a massive recall of their outstanding stocks in Australia.

The milk powders have been linked with a major outbreak of gastroenteritis in babies caused by an uncommon type of salmonella bacteria.

Almost 1,000 worried parents telephoned the State Health Department yesterday for advice. Its emergency infant-welfare team--on 616 7777--will man the service again until 10 o'clock tonight.

Two of the companies--Nestle and Abbott Laboratories--said yesterday they had found no evidence of the salmonella bredeney organism in their Lactogen and Similac powders.

The Australian Salmonella Reference Laboratory in Adelaide has confirmed 80 cases of salmonella bredeney infection.

Both Federal and Victorian Health Ministers said last night that if the companies involved were proven negligent, they would support parents who wished to take legal action.

But the Federal Minister, Mr. Hunt, said he did not know of any deliberate breach of health regulations.

The State Health Minister, Mr. Houghton, said that as Acting Agriculture Minister he had asked the Agriculture Department to investigate the Victorian factory which had produced the contaminated milk powder.

The Agriculture Department licensed the Tongala factory, owned by the Nestle Company, which processes the four brands.

Mr. Houghton said: "I have asked for a full report, including, at my request, a report on any possible legal action that the Government can take."

Mr. Hunt said State Health authorities and the manufacturing companies were discussing possible compensation payments.

All food handlers at the Tongala plant will be tested to determine whether they are carriers of the organism.

Brisbane THE COURIER-MAIL in English 27 Jul 77 p 10

[Text] Melbourne--The Nestle Company continued to produce milk powder at its Tongala plant after members of the company became aware of contamination in August last year, the Victorian Public Health Commission was told yesterday.

The Victorian Health Department's assistant chief health officer (Dr. Graham Rouch) told the commission that infected milk-drying equipment used by Nestle at Tongala, in northern Victoria, was the culprit in an Australia-wide outbreak of gastroenteritis.

Dr. Rouch said he regarded the decision to continue production as "totally wrongheaded."

He said the company confirmed the presence of the gastroenteritis organism, salmonella bredeney, last August.

"The organism was growing in the insulating material of a spray drier at the Tongala plant," Dr. Rouch said.

"We don't know how it got there, but cracks in the equipment meant that it was wet with warm milk and able to proliferate."

Forty-eight Victorian cases of gastroenteritis have been linked positively with the salmonella bredeney organism--which was detected in four brands of milk powders.

Many more cases are believed to have escaped the Health Department's notice.

Cases have been reported in all other States.

The organism has led to fever, diarrhoea, dehydration and vomiting, mostly in young children.

At least two victims needed hospital treatment for serious illness.

Dr. Rouch said that at peak season, Nestle was producing 2,000 11-kilogram bags of milk powder a day at the contaminated Tongala plant.

Most of this was shipped overseas after being packaged at the Nestle Factory at Dennington, near Warrnambool.

At the Dennington packaging plant Similac powder (a product of Abbot) and Enfamil (made by Bristol-Myers) also was contaminated.

Brisbane THE COURIER-MAIL in English 22 Aug 77 p 2

[Text] Melbourne--Victorian health officials are concerned that bacteria which has contaminated a diet supplement, Complan, may have spread to other foods.

Officials are checking urgently that it has not spread to ice creams, pastries and coffee whiteners.

Later this week experts from Glaxo, the company which produces Complan, will discuss with Government health officials stricter testing of diet supplements and other foods.

Glaxo officials have claimed that their contaminated product still will pass current Government tests.

Salmonella Adelaide, which causes sickness and diarrhoea, was discovered in a protein base, calcium caseinate, used in white powder Complan.

Medical students at a Melbourne Hospital became ill after a Complan dietary experiment.

The milk extract casein is used also in making other foods.

"Our main interest is to track down any other consignments," said assistant Chief Health Officer of the Victorian Health Department (Dr. G. Rough).

The contaminated casein has been traced to the Drouin Co-operative Butter Factory.

Agricultural Department experts have closed the factory while they check on the source of the bacteria.

Glaxo has mounted a massive nationwide recall operation to collect 4,000 Complan packs.

While some may have been sold to the public, most are believed to be in warehouses and pharmacies.

The danger packs are numbered 5139-5157.

Glaxo will have to destroy another 4,000 packs which had not left its factory.

The Federal Health Minister (Mr. Hunt) said at the week-end no salmonella food poisoning cases had been attributed to Complan.

He said Glaxo Pty. Ltd. had co-operated fully with State and Federal health authorities.

Mr. Hunt said Federal health officers would meet food industry representatives today to discuss the matter.

Melbourne THE AGE in English 24 Aug 77 p 4

[Text] People who suspect salmonella contamination in food must now notify the Health Department immediately.

This is one of several new tough regulations introduced by the State Government and Health Commission yesterday.

The regulations require immediate notification by telephone plus confirmation in writing within 24 hours of a suspected outbreak.

Complementary regulations--requiring micro-biological monitoring for pathogens or disease-producing bacteria--were approved in principle by the Health Commission. They are expected to be in force within weeks.

The tough new measures apply to the manufacture of foods such as infant formulas and dietary supplements for elderly and sick people.

The regulations will concentrate on salmonella following two identifications of infections in Victoria recently. But they could be expanded to other pathogens later if necessary.

The notification regulations, approved by the Governor-in-Council, will guarantee immediate notification of any suspicion of isolation of a salmonella infection in any food product.

The Health Minister, Mr. Houghton, said the regulations, under the Health Act, had been drawn up following last month's detection of one strain of salmonella in a factory producing baby formulas.

"The regulations will require the proprietor of any establishment where food is being manufactured for human consumption, or the officer in charge of any hospital or laboratory to immediately notify the Chief Health Officer by telephone when any pathogen, including salmonella, is suspected or isolated," Mr. Houghton said.

Any findings are to be confirmed in writing within 24 hours.

INCREASE OF WHOOPING COUGH

Sydney THE SYDNEY MORNING HERALD in English 5 Aug 77 p 21

[Text] Whooping cough is on the increase in Sydney. About four times as many cases as usual have been treated at the Royal Alexandra Hospital for Children recently.

Public health officials said yesterday that the outbreak should be a warning to parents to have children up to 18 months old immunised against the illness. The same vaccine also protects against diphtheria and tetanus.

Fifty cases of whooping cough have been confirmed at the Children's Hospital in the first six months of this year by isolating the disease organism.

This compares with the usual 20 to 30 isolations a year, according to the director of microbiology, Dr David Dorman.

Isolations reflect only about half the actual number of cases because the whooping cough germ is difficult to recover from specimens.

Three babies with whooping cough were in the hospital yesterday. An analysis of 200 whooping cough isolations at the hospital in six years to March this year showed that about half the patients were under six months.

Surveys in the southern metropolitan health region suggest that about 84 per cent of Sydney schoolchildren are fully immunised against whooping cough, diphtheria and tetanus.

Immunisation against the three diseases may have fallen off in some areas because of British reports of rare cases of brain damage from whooping cough vaccine.

Health officials emphasised yesterday that there was considerably greater risk of brain injury from natural whooping cough.

Immunisation against whooping cough should start at three months of age. It is not recommended for children older than 18 months because of an increased risk of adverse reactions.

TYPHOID CASE

Brisbane THE COURIER-MAIL in English 23 Aug 77 p 3

[Text] Port Moresby (AAP-REUTER)--A girl, 10, from a Port Moresby squatter settlement has typhoid fever.

A Health Department spokesman said yesterday that a vaccination programme had been carried out in the settlement, but the source of the infection had not been found.

The girl was found to have typhoid after she was admitted to hospital on August 10 for treatment for another condition.

OUTBREAK OF VIRUS INFECTIONS

Sydney THE SYDNEY MORNING HERALD in English 24 Aug 77 p 2

[Article by Shaun McIlraith]

[Text] Many Sydneysiders have been laid low by an outbreak of infectious illness. In some cases it is influenza, in others it is a flu-like sickness.

At the same time, an exceedingly small virus has been detected for the first time in Sydney and is believed responsible for a cluster of gastroenteritis cases in a limited area of the western suburbs.

This infection is marked by diarrhoea and vomiting lasting two or three days.

The influenza in Sydney is of the A/Victoria/3/75 strain and is far below epidemic proportions, according to Dr W. A. Lopez, adviser on communicable diseases to the NSW Health Commission.

The virologist at the Institute of Clinical Pathology and Medical Research, Mr Alan Murphy, said that while 15 to 20 per cent of Sydney people had been infected with the A/Victoria strain last year, only a small percentage was likely to have experienced it this year.

Dr Lopez said the illnesses resembling flu were producing fever, a very raspy, dry throat, aches and pains, but not much cough. They usually lasted two or three days.

He warned that people recovering from such infections should not perform strenuous work because of a risk of straining the heart muscle.

Virus isolations in Mr Murphy's laboratory suggest that some of the infections are being caused by para-influenza and adeno viruses.

The para-influenza virus produces tracheitis, bronchitis and, in children, a croup-like illness.

Adeno viruses also produce a croup-like illness in children; in adults they cause sore throat and conjunctivitis.

The small virus detected for the first time in Sydney is a parvo virus, which can be identified only under the electron microscope. It cannot be cultured in the same way as influenza viruses.

Mr Murphy's laboratory detected it in faecal specimens from gastroenteritis cases.

BRAZIL

FIRST HOSPITAL FOR TROPICAL DISEASES OPENS IN RIO

Rio de Janeiro JORNAL DO BRASIL in Portuguese 14 Sep 77 p 13

[Text] At 1000 hours today, in the Gaffree-Guinle Clinic Hospital located at 775 Mariz e Barros Street, the first infirmary for tropical diseases in Rio de Janeiro, with 24 beds, will open, as well as a new general surgery infirmary, likewise with 24 beds.

According to the director of the hospital's infectious-contagious disease section, Prof Mario Barreto Correia Lima, the incidence of tropical diseases (such as schistosomiasis, Chagas' disease, typhoid and hepatitis) is rather extensive in Rio, "to the point where there is a hospital devoted specifically to them," the Sao Sebastiao Hospital. There are also wards in the Sao Francisco de Assis Hospital and in that of the UERJ [Rio de Janeiro Students' Union].

Voluntary Treatment

In addition to patients suffering from these diseases which are typical of the tropical regions, all individuals who are admitted there with infectious diseases of any kind will be treated if they so desire, so long as the clinic confirms the need for their confinement.

Prof Correia Lima, who is also chairman of the Rio de Janeiro Medicine and Surgery Association, is implementing a plan for treatment on a voluntary basis, wherein a register would be made of the doctors concerned so that they could be called upon in the event of catastrophes or emergencies throughout the entire state of Rio de Janeiro, and physicians from all the municipalities could participate therein.

The plan, which is under study, will most likely be activated by the end of this year; because it includes an opportunity for working on holidays, by providing preventive medical treatment when the doctors would devote a few days of their spare time to this instruction. According to the professor, the main purpose of the plan is to provide assistance to the community. He said that, depending upon the situation, traveling clinical units or fixed stations would be used as medical schools and for other purposes.

Dr Correia Lima also stated: "Medicine is not as mercenary as many people try to prove"; citing the fact that many doctors have already expressed an interest in participating in the volunteer system medical plan. "But doctors are human beings like anyone else, and need money or remuneration in order to survive." He added: "I do not deny the existence of venal professionals, but they are few in number and they do not pose a danger, as many people claim."

The Gaffree-Guinle Hospital is a foundation affiliated with the Federation of Detached Federal Schools of Rio de Janeiro. Offering treatment that ranges from general clinical and surgical care to pediatrics, it has nearly all kinds of clinical facilities, and its medical treatment system includes service free of charge to the needy community, as well as treatment provided at rates which vary according to the financial status of the patient.

AFRICAN BEES KILL CHILD

Sao Paulo FOLHA DE SAO PAULO in Portuguese 15 Jul 77 p 16

[Excerpt] Ourinhos--A 13-year-old boy was attacked and killed by a swarm of African bees the day before yesterday, when he was trying to climb a steep hill in the locality of Sao Sebastiao, in Jacarezinho. While climbing, he failed to notice an enormous beehive and accidentally hit it. Police and other people were able to rescue the body of the boy only after fighting the poisonous insects for 3 hours.

Two other boys, 9 and 13 years old, who were following the victim in his climb, were able to run away and went to seek help. A milkman heard the shouts when he was near the site. He tried to save the victim, but was unable to withstand the attack of the bees, and ran to the police post, 3 km away, where he reported to an agent.

The police and other people reached the place, which is of difficult access and covered by vegetation, at about 1330 hours. They tried several times to pull the victim away from the swarm of bees, but these attacked anyone who came near. At 1730 hours, after a great deal of struggle, the police rescued the boy, who was already dead. In Santa Casa de Jacarezinho, 10 persons stung by the insects were treated. Until yesterday morning a military police team was fighting the African bees, burning old mattresses and using insecticide, oil, and gasoline.

MALARIA THREAT; SCHISTOSOMIASIS

Rio de Janeiro O GLOBO in Portuguese 2 Aug 77 p 5

[Text] Brasilia--Malaria, although it has been eradicated in the areas of the country of greater density and demographic and socioeconomic

importance, still represents a threat to the population of 81 percent of the national territory. This is especially the case for the Amazon region, because of the constant migratory movements and natural conditions favorable to constant spread of the disease.

This statement was made yesterday by the superintendent of Public Health Campaigns, Ernani Motta, when he spoke about "the present situation of great endemic diseases" at the Sixth National Health Conference.

"In spite of the victories of the SUCAM [Superintendency for Public Health Campaigns], which practically eradicated malaria in various areas of the Amazon jungle, and of the fact that at the present time only 87,000 cases per year were registered in the country according to 1976 data, as compared with 8 million cases registered in 1954, the disease must be constantly fought against, through direct action or inspection where its transmission has already stopped," said the SUCAM chief.

Fight Against Disease

Ernani Motta said that in the Amazon region, which had 88 percent of the cases registered in the country last year, malaria is endemic. This is caused by the peculiar characteristics, such as constant humidity and rain, in addition to the precarious conditions of the dwellings which expose man to constant contact with the disease.

Up to now the method found by the SUCAM to fight malaria has been continued application of DDT in the houses every 6 months, elimination of breeding areas, and spraying areas of intensive clearing with other insecticides, through an agreement with businessmen in Amazonia.

The area where malaria is present in the country was divided into two regions. The first, that of short-term eradication, has 1.8 million square km and 34 million inhabitants. This area includes all the federal units not included in the legal Amazon region. At long range, the fight will be carried out in all the units of the Amazon region, covering 5.1 million km with 9.1 million inhabitants. There, as a consequence of development works, opening of roads, settling, mining, and agricultural and livestock undertakings, the total eradication of the disease will be possible only over a longer period of time.

On the other hand, in view of the complexity and deficiency of the health infrastructure in the Amazon region, attempts are being made to check into the possibility of associating projects of malaria control with the specific programs of the Ministry of Health in that region.

Schistosomiasis

According to data collected up to last year, schistosomiasis is to be found in an endemic manner in Minas Gerais, and from Para to north of

Parana, excepting Piaui, and according to the SUCAM superintendent, in addition to representing a problem of medical assistance and public health, it is also one of government policy because of the deep socio-economic repercussions of its effects.

Ernani Motta said that given special resources, the Special Program of Schistosomiasis Control (PECE), was the method found by the government to reduce and stop the spread of the area affected by this disease.

SCHISTOSOMIASIS FOCUS IN AMERICANA MUNICIPIO

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 26 Aug 77 p 15

[Text] The Campinas regional agency of the Superintendency for Control of Endemic Diseases--SUCEN--has identified a new and large focus of schistosomiasis in the Salto Grande lagoon, close to the Praia Azul, a major tourist spot in the area of the municipio of Americana.

Dr Anisio Ribeiro de Lima, the director of the unit, issued a communique yesterday afternoon advising the population not to "frequent the beaches." The focal point of the snails has been pinpointed, 200 meters from the urbanized center and in the strip of land held by a club, the Enseada. Since 1970 the lake has been controlled by the Secretariat of Health, which has already found and eliminated several colonies of the disease-carrying snails. Now, as always happens when an area of contagion is located, all the people who may have been contaminated will be treated at the health center at Campinas, by the Adolfo Lutz Institute or by the SUCEN itself. If on examination the disease is found to be present, the patient receives adequate medication (Mansil, orally, one dose) and should return for final testing. All treatment is free. The residents of the area will be sought out by visiting [inspectors] while today special teams from the superintendency will begin an intensive pesticide campaign in the lagoon in the area of the snail focus.

In 1976 SUCEN closed off a sector of the "little fountain," almost within the city of Paulinia. The snails were effectively wiped out and the latest studies indicate that the acute phase, the most dangerous, has caused no deaths. The agency's major concern at the moment is outside the lagoon, in Jardim Sao Marcos, where of the 400 individuals who were examined 25 were found to have schistosomiasis. The neighborhood, on the outskirts of Campinas, is almost completely occupied by a shanty town ["favela"], and the inhabitants of the shacks use the water from a gully (over which out-houses are installed) to bathe in, wash clothes and water the small gardens. According to Ribeiro de Lima, the only solution to the problem would be to install a basic sanitation system, which is not feasible since most of the residents are occupying illegal housing. In the meantime SANASA--the municipal agency that maintains the water and sewer systems--is trying to meet the needs with a precarious holding action.

Praia Azul

The news of a new schistosomiasis focus caused the usual reaction from the businessmen of the Praia Azul. Most of them attributed the announcement to purely economic interests, "mainly because there was no winter this year and our weekend crowd did not go elsewhere, but continued to visit the lagoon as usual," as Luiz Silveira declared. Silveira manages one of the hotels, which according to the owners of some of the neighboring farms has as much turnover as the motels installed on the other side of the Anhanguera road.

Actually, the frequenters of the Praia Azul can be clearly divided into two groups. The first comprises the "farofeiros" [loud mouths] who leave Sao Paulo and the ABC [Santo Andre, Sao Bernardo and Sao Caetano: greater Sao Paulo area] every Saturday and Sunday, traveling 130 km of congested roads to rent boats, to fish (for "piranha," "tilapia") and mainly to picnic on the beach of the lagoon. The second group uses the 18 hotels--accommodating 280 guests--which actually become a combination nightclub and restaurant every night after 2030 hours.

Between 1972 and 1973, at the height of a sanitation campaign, bathing was summarily prohibited in order to eradicate schistosomiasis in the lagoon. There were signs warning frequenters and during the day small boats patrolled all the most favored areas. At night, mysteriously, the boats disappeared and so did the signs. In the morning they were often found burned.

YELLOW FEVER-CARRYING MOSQUITOES

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 3 Aug 77 p 14

[Text] Ernani Motta, the superintendent of Public Health Campaigns of the Ministry of Health, yesterday said that the discovery of yellow fever-carrying mosquitoes in the Canela Valley in Salvador, does not mean that there will be an outbreak of this disease in the city. Ernani Motta explained that it is not probable that the mosquitoes are contaminated by the germs of yellow fever, which has already been eradicated in Brazil. The eradication of the arbovirus causing yellow fever prevents the Aedes Etyptis, or mosquito, to be contaminated, and thus pass the disease to man. Obviously the mosquitoes alone do not transmit the disease. Ernani Motta also added that the transmitting mosquito has already been eradicated in Brazil, but still survives in Africa, its original habitat. Sporadically, the SUCAM [Superintendency of Public Health Campaigns] discovers concentrations of Aedes mosquitoes on the Brazilian coast, and this routine fight is the basis of the work of the organization. Such concentrations are made up of mosquitoes that enter the country through ports, airports, and borders, but they are not always contaminated by the fever arbovirus.

SIGNIFICANT RISE IN GERMAN MEASLES REPORTED IN CAMPO GRANDE

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 15 Sep 77 p 25

[Text] Yesterday, the Campo Grande secretary of health, Alfredo Pinto de Arruda, announced a significant increase in cases of German measles in the city, giving assurance, however, that there was no cause for alarm, inasmuch as a greater incidence of the disease during the period between the end of winter and the arrival of spring is normal. During July, 7 cases of German measles were officially reported; while 10 cases were reported in August and 30 cases during the first 13 days of September.

Meanwhile, according to other medical sources in the city, an upward trend reaching 70 cases is anticipated for the month of September; however, the incidence should not be regarded as being of epidemic proportions, like that in Dourados, 2 months ago, when over 700 persons contracted the disease and the authorities were forced to suspend classes in the schools for over 2 weeks.

The secretary explained: "German measles is a difficult problem, because there is no specific vaccine to counter the disease"; and he warned pregnant women not to come in contact with the sick children.

GERMAN MEASLES OUTBREAK

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 3 Aug 77 p 14

[Text] The prefect of Dourados, Jose Elias Moreira, yesterday revealed that an outbreak of German measles has already affected over 600 persons, although the health authorities reported last week that the number of cases did not exceed 200. The statement of the prefect could increase the panic already prevailing among the city's population, which has exhausted the supplies of gamma globulin and immunoglobulin--medications that give greater resistance to the organism. In spite of the fact that schools have been closed, which should reduce the spread of the disease, cases of German measles continue to be registered daily in Dourados. Fearing the disease, which can cause deformity of the fetus, many pregnant women, mainly the wealthier ones, are leaving the city. Such is the case, for example, of the prefect's wife, who has left for Cuiaba. The poor people, in the meantime, are exposed to the outbreak of German measles, not only because of lack of information, but also because of the inefficiency of the health authorities who until yesterday had not started vaccination.

MENINGITIS OUTBREAK

Brasilia CORREIO BRAZILIENSE in Portuguese 6 Aug 77 p 8

[Text] Cuiaba--The report this week of seven cases of meningitis in the municipio of Diamentino brought about drastic action at the Mato Grosso Public Health Service, concerned with a search for "surplus vaccines" in other states, as well as an urgent request that doctors, medicines and a technician from the SESP [Special Public Health Service] foundation be sent to the place.

The bureau had not taken cognizance of the outbreak until after the mayor of Diamentino had come to this capital the day before. Yesterday, Antonio Alves Duarte, chief of the Ministry of the Public Health Service, confirmed the outbreak of seven cases of meningitis. He requested that it not be reported "because problems in other municipios might arise," in an overt attempt to minimize the unpreparedness of the bureau.

The request is from the governor and the bureau, because we have no vaccines, and the problem might become worse.

It added that "a medical team, medications and a technician from SESP were already in Diamentino, and by request had arrived yesterday from Rio de Janeiro." Basically, the work of this technician from SESP can be summarized as collecting material for analysis to determine what type of meningitis it is. "We still do not know whether it is meningococcic or some other type of meningitis, because we do not have facilities for obtaining an analysis here," Joao Melo emphasized.

"From what we know, there are seven cases, which have been hospitalized. All were isolated and four of them have been shown to have the disease. The others are still hospitalized, but there has been no confirmation. By Saturday we expect the members of the medical team to return, and then we will know the actual number of cases of the disease," he stated.

Rio de Janeiro JORNAL DO BRASIL in Portuguese 10 Aug 77 p 12

[Text] Mr Gelson Lopes, chief of the Ministry of the State Public Health Service, stated that the medical team sent to Nazare das Farinhas in Reconcavo, has verified several cases of meningitis but only one death. He guaranteed that any danger of an outbreak was remote because the virus was of the benign type and the work of epidemiological surveillance had been attended to.

According to the same medical team, two other deaths which occurred in the Ilha de Itaparica were not caused by meningitis but by measles, with the additional aggravant that the children were dehydrated. In any case, all young children in Ilha have been vaccinated.

Mr Gelson Lopes said that the type of meningitis discovered in Nazare das Farinhas is the staphylococcic kind, "which generally attacks persons with throat ailments." The child who died is from a family in which four other persons were stricken with meningitis, but the other three are now out of danger.

Brasilia CORREIO BRAZILIENSE in Portuguese 17 Aug 77 p 8

[Text] Cuiaba--The outbreak of 10 cases of meningitis in the small village of Alto Paranatinga, 400 kilometers from the capital, was reported yesterday in the legislative assembly by opposition leader Deputy Carlos Bezerra, at the same time that he criticized the secretary of the state Public Health Service and asked that immediate steps be taken because of the frequent appearance of focal points of the disease in different places in the state.

Carlos Bezerra revealed that he had received the communication the night before, which stated in detail that the people in that city, which is located in the municipio of Chapada dos Guimaraes, are apprehensive about the appearance of 10 cases of meningitis in this week alone, and that nothing has been done up to now by the Mato Grosso Public Health officials.

Rio de Janeiro O GLOBO in Portuguese 19 Aug 77 p 7

[Text] Sao Paulo (O GLOBO)--Walter Leser, the secretary of health for the state of Sao Paulo, denied yesterday that meningitis has broken out again in the state. He explained that the average of eight cases a day, which is presently being reported, reflects "an endemic situation that already existed before the outbreak from 1971 to 1975 and will continue to exist until there are conditions to eradicate the disease." However, some specialists are in partial disagreement with the secretary, and feel the present incidence of meningitis cases is higher than it was before that outbreak. But Walter Leser attributes the increase to the population growth, the precarious housing conditions of most of the population and even crowding on the buses. According to the secretary, promiscuity is the principal factor in the spread of meningitis, which is being transmitted in an "underground fashion."

FINAL PHASE OF POLIOMYELITIS VACCINATION DRIVE BEGINS

Rio de Janeiro O GLOBO in Portuguese 27 Aug 77 p 10

[Text] Woodrow Pimentel Pantoja, the state secretary of health, announced yesterday that the third and final phase of the vaccination program, to administer the third dose of vaccine against poliomyelitis (infantile paralysis) and a single dose against tuberculosis, will begin on Monday.

Stressing that "it is not a drive, but a program that must be reactivated annually to cover a broader segment of the population," he attributed the success of the first two phases to the press, for rallying the people, and appealed to it to continue its help in the third stage.

And now intradermal BCG will be given to children from 1 month to 5 years of age, to eliminate not only tuberculosis, but tubercular meningitis, which is provoked by the tuberculosis virus. This disease, which is responsible for a high mortality rate, mainly in the lower socioeconomic strata of the population, can only be eliminated by vaccinating the children.

Pantoja announced that the CEME [Central Enterprise for Medicines] has provided the secretariat with 908,235 doses of intradermal BCG, and pointed out that in this last phase, the first and second doses of Sabin vaccine will continue to be administered, as well as the measles vaccine, for children who did not receive them in the previous phases.

"We must also alert parents to the fact that the children must have all three doses of the Sabin vaccine to be immunized against the paralysis."

The vaccination will begin on Monday in Nova Iguacu (in the municipio of Rio the vaccination is supervised by the Department of Public Health and will be administered on 8 and 9 September) at 31 stations, and will continue until 6 September, to cover a target population of 124,000. [sentence as published]

Besides Nova Iguacu, in the metropolitan region and the southern coastal area the secretariat plans to vaccinate the following population: 15,000 children in Nilopolis and 44,000 in Sao Joao de Meriti, from 8 through 10 September; 68,000 children in Caxias, from 13 through 17 September; 51,000 children in Petropolis, Mage and Teresopolis, from 19 through 23 September; 71,000 children in Sao Goncalo and Itaborai, from 26 through 30 September; 13,000 children in Mangaratiba, Itaguai and Paracambi, as well as 8,000 in Angra dos Reis and Parati, on 3 and 4 October; and 34,000 children in Niteroi and Marica, from 5 to 7 October.

The secretary said the health stations will have the vaccines available throughout the year, "but it will not have the so-called visiting health team, which is the liaison between the station and the home."

"We lack visiting health teams to supervise the situation--for example, if the child has had one dose of vaccine and not the next one, even if the family lives on a farm, the team will remember it, or get the child, etc."

INDIANS DENOUNCE FUNAI'S FAILURE TO COMBAT INFLUENZA

Rio de Janeiro O GLOBO in Portuguese 20 Aug 77 p 2

[Text] Brasilia (O GLOBO)--Yesterday Shavante Indian chiefs Apoena and Aniceto, from the village of Sao Marcos in the Mato Grosso municipio of Barra do Garca, denounced the MDB [Brazilian Democratic Movement] leadership in the Chamber of Deputies because FUNAI [National Indian Foundation] had refused to give them a supply of medications to fight an outbreak of influenza, which they claimed had taken the lives of seven children.

The complaint was transmitted to the plenary by MDB vice leader Joaquim Bevilacqua (SP), who appealed to the ARENA [National Renewal Alliance] leadership to get in touch with the FUNAI management in order to solve the problem. In reply, ARENA vice leader Dib Cheren (SC) promised to inform Minister of the Interior Rangel Reis of the fact and to inform the plenary meeting of the measures to be adopted.

ARENA Memorandum

Later on, the ARENA leadership distributed the following memorandum to the press, which was read at the end of the session of the Congress by Deputy Dib Cheren:

"As soon as the problem in reference to an epidemic outbreak which had occurred on the Sao Marcos Indian Reservation was reported to the ARENA leadership by acting leader Deputy Joaquim Bevilacqua of the MDB, we sought understandings with the Ministry of the Interior through Dr Orlando de Almeida e Albuquerque, chief of the private office of the aforementioned minister. Upon being informed of the complaint, this official promptly took steps to have a representative from FUNAI come to the office of the majority leadership in this house, not only to give the necessary explanations, but also to conduct the aforementioned Indians so their requests could be attended to. Meantime, upon arrival of the FUNAI representative here, we were notified that the chiefs had already returned to their tribes.

"We were informed independently that actually, about 20 or 30 days ago, a mild outbreak of influenza had occurred on the reservation; however, without reaching epidemic proportions. Nevertheless, FUNAI took the necessary steps by means of medical attention. Today, what is officially known is that the disease in question no longer exists. However, with the news furnished by chiefs Aniceto and Apoena, FUNAI immediately got in touch with the 5th police precinct at their Cuiaba headquarters to check out the origin of this fact, and if proved, to take immediate steps to correct the situation. Mr Silvio Reiner, the said representative, further explained that this reservation at this time was under the jurisdiction of the Salesian Missions by virtue of agreements and also that it was the object of a vast community project aimed at development of the Shavante

nation, for which FUNAI has already earmarked substantial sums of money. I can state that if the problem actually existed, I am satisfied that it will be corrected, and the most persuasive argument we have for this assertion is the conscientiousness with which FUNAI promptly responded to our official communication."

Brasilia CORREIO BRAZILIENSE in Portuguese 20 Aug 77 p 5

[Text] The native village of Xavante de Sao Marcos, in Barra do Garca Mato Grosso, has been seriously struck by influenza and diarrhea, with seven children already dead. Tribal chieftains Aniceto and Apoena went to Brasilia to appeal for medical aid and, in the absence of Gen Ismarth de Oliveira, president of the FUNAI [National Indian Foundation], they were ill received by the acting director, Colonel Joel, and also by the physician, Dr Carlos, who offered them a box of medicines for chief Aniceto to take for himself and his family. A report was made to the chamber by Deputy Joaquim Bevilacqua, who added the following:

"Based on his dignity and his responsibility as a chieftain, he refused this box of medicines, since it would not serve to remedy the problems of the settlement, which includes four tribes totaling about 1,000 Indians. Also, the action which General Ismarth had promised, was denied them in his absence by Colonel Joel. Thus there was nothing else for the two chieftains, now without funds or anywhere to turn, to seek us out so that we could make an appeal here."

Bevilacqua made an appeal to the leadership of the National Renewal Alliance for collaboration with the party opposition in the solution of the problem.

We are dealing now with the health and the preservation of the native species, in a settlement of about 1,000 Indians, suffering from a very serious epidemic of influenza and intestinal ailments, and it seems really necessary to arrange immediate care by a doctor.

POLIOMYELITIS VACCINATION CAMPAIGN TO BE EXTENDED TO INTERIOR

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 17 Aug 77 p 13

[Text] For the first time, the vaccination campaign against poliomyelitis, to be undertaken on 24 August in the capital and 31 August in Greater Sao Paulo, will also be extended to the interior of the state. The Department of Public Health took this decision after ascertaining that the principal cities in the interior, such as Campinas and Ribeirao Preto, for example, have problems similar to the peripheral zones of Sao Paulo: basically, the population is facing problems in reaching public health centers, which are generally far away. This is the seventh time that the

Department of Public Health, in collaboration with the Department of Hygiene of City Hall and the state and municipal departments of education, has organized a campaign for vaccination against poliomyelitis. Public health officials have decided to step up the immunization of children, which is done routinely at public health centers, after confirming that the percentage of children immunized was very low. The same procedure has also been followed in reference to the vaccine against measles and the BCG intradermic vaccine used on students.

Since the campaigns were started in 1975, there has been a drop in the number of recorded cases of poliomyelitis in the State of Sao Paulo: from 584 cases in 1975 to 300 cases in 1976. Meantime, the number of cases in Greater Sao Paulo has increased from 30 in 1975 to 80 in 1976. In the first 5 months of this year, 43 cases of the disease were reported to the Department of Health, 17 of which were in Greater Sao Paulo.

If the protection achieved in prior stages had been maintained, more than 400,000 children between the ages of 2 months and 3 years would have been vaccinated in the capital alone. In order to attain this number, 568 vaccination stations will be installed at public health centers, schools and community centers and 1,200 persons (700 technicians) will be employed.

VACCINATION CAMPAIGN PLANNED FOR SAO PAULO SCHOOLS

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 31 Aug 77 p 14

[Excerpt] By the end of the year, the Secretariat of Health plans to immunize 80 percent of the school population in the state, using the BCG intradermic vaccine against tuberculosis. This will be the first time the secretariat has succeeded in achieving the basic goal of the National Tuberculosis Control Program. While 907,000 children between 5 and 14 were vaccinated last year, by July of this year 1.2 million school children had already been vaccinated, with plans calling for the administration of 1 million more doses by December.

Sao Paulo is one of the most backward states in the development of the national tuberculosis program. While the other states in the south have already completely carried out all phases of the program, the Secretariat of State did not succeed until this year in establishing the new system of treatment on the ambulatory level, with preventive care, diagnosis and treatment in 187 health centers.

According to the supervisor of the phthisiological department of the secretariat, Anibal Gil de Oliveira, the goal for this year is to double the number of centers which launched this service. This means that a half of the state health units will additionally provide this care, including the routine administration of the BCG intradermic vaccine.

In addition to being more efficient, the intradermic vaccine is preferable to the oral form because of the greater immunization capacity and also its longer usable life. While the oral BCG vaccine retains its usefulness for 15 days, the intradermic vaccine can be stored for up to a month. However, the undesirable aspect of the intradermic BCG vaccine, according to Prof Anibal Gil de Oliveira, is that it requires greater technical care in its use.

For this reason, the secretariat has been training personnel since 1974 to make the changeover in the immunizing process. Vaccinations will be done in 1975, although only cautiously, as the supervisor of the phthisiological department stresses. [as published] In that year, 500,000 persons were vaccinated.

The secretariat technicians are concerned about the stability of the tuberculosis infection rate in the first school year. Two years ago this rate ran to 7 percent of the school children in the first year of schooling. This meant that the sufferers from the disease propagating tuberculosis had not yet been effectively reached. It is estimated that the state had an average of 40 reported cases of tuberculosis per 1,000 inhabitants every year. Last year, the Secretariat of Health dealt with only 3,278 reported cases.

SCARLET FEVER CASES CAUSE TWO RIO SCHOOLS TO SUSPEND CLASSES

Rio de Janeiro O GLOBO in Portuguese 14 Sep 77 p 15

[Text] Cases of scarlet fever in children (two at the Sao Jose School, at 1067 Conde de Bonfim Street, and two others at the Porto Seguro School, at 47 Isidro de Figueiredo Street) have caused these institutions to suspend their classes. Yesterday, the principal of the Porto Seguro School (which was closed last Friday), Regina Mendes, ordered it to be disinfected with agents prescribed by the Epidemic Department of the state's Health Secretariat. She said that the school would not reopen until next Monday.

The Sao Jose School's reading and writing instruction center and kindergarten also had their classes cancelled from 7 to 11 September. The principal, Father Bruno da Silveira Sobrinho, said that this was a "precautionary measure, because there has been no outbreak." However, he remarked that he had received telephone calls from principals of other schools, asking for advice, because they had the same problem.

The two children who had contracted scarlet fever returned to school yesterday, after having been kept out of school for 11 days. They brought doctor's certificates guaranteeing that they no longer posed any threat of contagion. The principal said that the pediatricians are still uncertain as to whether these were actual cases of scarlet fever. Nevertheless, he immediately notified all the parents of the students:

"The 400 families who have children in the reading and writing instruction center were notified by means of a circular letter which advised them to consult a pediatrician. I contacted some pediatricians as well, and they were not in favor of using any treatment on the students. One of them said that it would be a good idea to disinfect the classrooms with formaldehyde, and I did what was recommended."

The principal of the Porto Seguro School, where there are 560 children between the ages of 3 and 11 years enrolled, discovered two cases of scarlet fever last Friday:

"One of the children had been absent from classes for 10 days. On Friday, her father brought her to school with a doctor's certificate stating that the child had recovered, but that she had had scarlet fever. Immediately thereafter, another father called me by telephone saying that his son would not be in school because he had scarlet fever. I notified all the children, telling them that their parents should take them to a doctor, and suspended classes. Then I reported the situation to the Eighth Educational District."

Claims of an Outbreak

At the request of the Eighth Educational District, she talked with the chief of epidemiological service at the Ninth Administrative Region's Health Center, Clovis Ramos de Freitas:

"He told me that it would not be necessary to close or disinfect the school, because the scarlet fever virus remains confined to the child's throat, and can only be transmitted by a human being."

Regina Mendes said that, subsequently, a man telephoned the school, "identifying himself as Roberto Silveira, physician in charge of the Public Health Service.

"After commenting that he had received many reports of an outbreak of scarlet fever, he said that we should remain calm, but that he deemed it a good idea to suspend classes and order the classrooms to be disinfected. Most of the parents called me to say that they had taken their children to a doctor."

Yesterday, the state and municipal secretariats of education announced that they were unaware of any case of scarlet fever in their institutions.

Scarlet fever is an acute infectious disease marked by a high fever, inflammation of the throat and a rash. It is highly contagious, and causes chills and fever, vomiting, migraine and sore throad. Of the types of scarlet fever (simple, anginal and malignant), the most serious is the malignant.

INFANT MORTALITY REDUCED

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 31 Aug 77 p 14

[Excerpt] Infant mortality in the city of Sao Paulo was reduced to the lowest level in its history this past July: 59.17 per 1,000. This information was provided yesterday by the Secretariat of Economy and Planning, with the explanation that when Governor Paulo Egydio began his term of office in March of 1974, infant mortality had reached a level of about 90 per 1,000. In the opinion of Secretary Jorge Willheim, government research on vaccination and basic health centers are the main factors responsible for the reduction of the number of cases.

BURMA

OVER 400 PLAGUE CASES REPORTED IN SEVEN MONTHS

Rangoon THE WORKING PEOPLE'S DAILY in English 19 Aug 77 p 1

[Text] The Central Epidemiological Unit of the Health Department has revealed that more than 400 cases of plague were reported throughout the country from January 1977 to the second week of August. Over 20 died because they reached hospital only when the disease was already too far advanced.

In the States and Divisions, Sagaing Division had the highest incidence with 171 cases of which one died, Mandalay Division came next with 57 cases of which five died, Shan State came third with 46 cases of which eight died. Kachin State followed with 37 cases but no fatalities.

In the remaining States and Divisions, Rangoon had 21 cases of which two died; Pegu Division had 29 cases of which four died; Magwe Division had 11 cases of which one died. The Irrawaddy and Tenasserim Divisions came through with a clean slate, while Arakan State had 11 with no fatalities. Kayah State had 16 cases of which one died. Karen State had 32 cases but no fatalities. Chin and Mon States did not have any reported cases.

CAMBODIA

RADIO CITES 70 TO 80 PERCENT DROP IN MALARIA CASES

Phnom Penh Domestic Service in Cambodian 2300 GMT 20 Sep 77 BK

[Excerpt] Our revolutionary army has launched a propaganda campaign among our people and trained them to vigorously combat malaria, a disease which

has plagued our people for more than 2,000 years and which none of the previous ruling classes could eradicate.

All members of our Revolutionary Medical Corps in towns and remote areas of our countryside who have been assigned to implement this campaign have been trying to fulfill their tasks. In fact since the beginning of the 1977 dry season they have tracked down malaria germs and studied all kinds of mosquitoes all over the country, engaging themselves in a drive to spray antimalarial chemicals and to kill mosquitoes in our villages, in the forests around our settlements and in communes and towns. Meanwhile, members of our Revolutionary Corps have also tracked down people already suffering from malaria. These are some of the efforts being made to fight this disease; others include the preparation of antimalarial formulas and serum to be used in inoculations.

While adhering firmly to the principles of independence, initiative and self-reliance, our Revolutionary Corps has through their research, been successful in preparing antimalarial medicines in the form of concoctions, pills and serums for injections. The raw materials needed for the preparation of these medicines, such as pine tree bark, cinchona bark, neem tree resin, "pramat monus herb," "chheu trau tree bark" and moon seeds, can be found throughout the jungle and countryside of our country. In fact, there are laboratories to prepare pharmaceutical products--especially antimalarial medicines--in all towns and even in remote areas of our countryside.

In addition to the efforts of our Medical Corps, all our workers, peasants, Revolutionary Army combatants, male and female youths and revolutionary cadres have also participated in the nationwide campaign to combat this disease. Our people have tried to eliminate all the breeding grounds of flies and mosquitoes near their homes and factories by filling all ponds and burying all trash and rotten fruits, by clearing all malarial areas around their villages and by building poultry pens and stables far from their living quarters. In addition, they have launched a drive to kill mosquito larvae in all ponds and reservoirs by raising fish, spraying ash and lime, and so on. Beyond all these measures they have also tried to strictly abide by hygienic rules, including drinking boiled water, cleaning their utensils with hot water and keeping their living quarters clean.

In short, under the correct and clearsighted leadership of our Revolutionary Organization, the current malaria eradication campaign in Democratic Cambodia has proceeded vigorously. During this period our people have noticed that malaria cases have been reduced sharply and rapidly, by 70 to 80 percent. Consequently, our people are enjoying better health.

TYPHOID FEVER OUTBREAK CONTROL MEASURES EFFECTIVE

Havana BOHEMIA in Spanish 29 Jul 77 pp 56-57

[Article by Susana Tesoro]

[Excerpts] On 14 July it was discovered that the water system had become contaminated along Santa Clara and Oficios streets in Old Havana. As soon as an investigation had been made, Provincial Hydrology reported that contamination of the system reached from Lamparilla [Street] to Jesus Maria [Street], a total of 42 blocks.

The Provincial Board of Public Health already had received a report on 8 [July] that a possible case of typhoid fever had been admitted to Salvador Allende Hospital. Two more patients with positive diagnoses were reported on the 11th. In view of the contamination of the water system and the appearance of confirmed cases of typhoid fever, it was decided that an epidemic outbreak of typhoid fever was at hand.

In view of the circumstances of contamination of the water system and the existence of several cases of typhoid fever, an intensive investigation has begun. The necessary steps are taken immediately. Simon Viera, chairman of the Executive Committee of the People's Government in Old Havana, becomes, by virtue of his authority, chief of Civil Defense in the municipality, and at a meeting of all officials involved it is decided that this organization will coordinate all operations.

The participating bodies are the following provincial and municipal boards of the people's government: Health, Aqueducts and Sewers, Community Services, Traffic, PNR [National Revolutionary Police], Transportation, and Septic Tanks and Cisterns.

By the 15th the situation was known, but it was getting worse, with the appearance of possible cases, as well as probable cases that became positive. Now a Civil Defense command post is being set up at [the intersection of] Aguiar and Tejadillo [streets], with operations coordinated by Capt Pedro Paez Riveron, chief of staff of Civil Defense in the community. Each day there are two inspections, in which every entity participates.

"The first measure taken," Captain Paez explains, "is universal vaccination throughout parts of the community adjoining the infected area, while withholding vaccination in the infected area itself to prevent carriers who now have the virus [as published] from becoming permanent carriers. This was done," he adds, "because the disease has an incubation period of 20 days, that is, it takes this long from the time when the virus enters the healthy person until the characteristic symptoms appear."

"There were many other measures," he points out, "such as increasing the search for infected people, maintaining supervision of the neighbors, stressing extreme cleanliness. In the newspaper GRANMA, an official notice from the MINSAP [Ministry of Public Health] began to appear, suggesting such measures as boiling the water. In the infected area highly chlorinated water was provided."

"The support given by the public must be mentioned," he insists, "for they have recognized the problem and have responded with a very constructive attitude. Mobilizations have taken place through the CDR's [Committees for Defense of the Revolution] for the complete, orderly sanitation of all longitudinal streets. Moreover, by means of the complaint desk set up in the headquarters of the People's Government, they have been continually reporting violations not only by organizations but also by some residents in respect to cleaning the entire infected area and taking necessary measures. And in this regard an effort has been made to respond to the public through the pertinent bodies, whether or not it concerns fumigation, sewers, etc. Sometimes problems are solved very quickly, though we know that everything cannot be taken care of in a single day, because Old Havana has been around for many years."

We're Now Paying the Price for Neglect

"What are the basic reasons for the outbreak? Well, one of them is the age of Old Havana, and the age of the pipes is a factor in their breaking, which causes contamination."

"Furthermore," Paez continues, "these streets were meant for horse-drawn vehicles; they are narrow streets, and the fact that there are a large number of warehouses in this municipality led the enterprises involved to use drays and vehicles weighing as much as 16 tons, and naturally they damage the pipes. So the Municipal People's Government issued a resolution excluding motor vehicles weighing more than 4 tons. This issue has been raised repeatedly with the organizations, but many of them do not understand; they see the matter from an individual point of view. They look out for their own interests, and do not see that this affects the public at large."

"This involves the accumulation of problems that exist in Old Havana: the lack of resources at times, forgetfulness, too...that is, we are now paying the price for neglect.

"Another of the basic problems is that people have installed unauthorized plumbing fixtures, but this is a problem that has to do with housing, and the condition of the buildings. For example, a person who has built an unauthorized room of wood on a rooftop reaches the point where he needs a bathroom, and he installs one, often unaware that there are two types of plumbing, storm drains and sewers: rain water flows into one, and sewage into the other. So he connects the sewer pipes to the storm drain.

I repeat that this is a housing problem, but citizens should be more responsible about this. In cases like these, which are not rare, but are included within the infected area, the People's Government has started repairing the pipes, [stopping] leaks, and decontaminating the water system, as well as installing plumbing if needed, in order to take every hygienic measure."

In Addition to Typhoid Fever

Captain Paez said further that there are organizations with shop spaces in Old Havana that have been neglected for many years and have become real piles of garbage and filth that endanger public health.

"There are organizations that have places in Old Havana the way people have attics," says Paez. "They have places where they store things they can't find a use for. There are other, still clearer, cases that are indisputable: for example, the fact that in one warehouse there may be barrels of cod liver oil that have been stored for years, and these barrels leak, and for weeks the stuff runs under the door into the street, and the place stays locked up. That is negligence.

"Finding an electric freight elevator covered with debris: that isn't a matter of points of view; that's a matter of absolute negligence.

"Rolls of paper stored with garbage, and all sorts of other materials, typewriters, cameras and photographic supplies and other things have been found. Isn't that negligence?

"And look, this was just in places located within the contaminated area, where the cleanup was carried out by order of the People's Government, and this is an area covering a third of the municipality.

"Also, no one knew to whom some of the places belonged; the groups themselves had forgotten about them, perhaps because of a change in administration, a poorly done inventory, or I don't know, somehow they lost track."

In closing, Paez says, "Well, to sum it up, I want to say that I'm telling you this as an aside. This is a problem to be solved by other state organs and by the courts, which are empowered to punish groups that deserve it, because our mission is to halt the epidemic. As of today, 22 July, we have 55 positive cases and 35 probable cases. Our interest now is in sanitizing places, curing the sick, vaccinating the public, and monitoring the epidemic, and to do this we need the support of all the people, who are now playing a decisive role."

Havana BOHEMIA in Spanish 5 Aug 77 pp 61-63

[Article by Miguel A. Masjuan]

[Text] Since the presence of typhoid fever in Old Havana was confirmed, the workers, technicians, and specialists of the entities charged with combating it have not rested an instant in their effort to eliminate it completely from the area, thus preventing its harmful effect from spreading to other sectors of the population.

At the moment, we are primarily interested in offering a general report about the enormous efforts that are being made to that end. Thus, so that the citizenry is aware of the measures taken, we have established direct contact with the comrades who are actively working on specific fronts.

Office of the Assistant Director of Hygiene and Epidemiology

To meet the existing situation, the following control measures were taken:

1. Antityphoid vaccination of all persons located within the 42 infected blocks.

2. Educational measures focusing primarily on boiling drinking water and on personal hygiene.

3. General health measures basically intended to improve environmental hygiene.

4. Epidemiological awareness.

Then, because of contamination of parts of the water system and confirmation of positive cases in the battle zone, specific measures were taken in the 15 blocks classified as the "critical area," that is, from Muralla [Street] to Jesus Maria [Street], and from Cuba [Street] to the Avenida del Puerto.

First, vaccinations were halted in this area, while they were continued in the other infected blocks. This step was taken because the fever produced by vaccination can be confused with the fever arising from the disease. When this had been done, the following measures were taken: blood cultures were performed for all suspected cases in order to obtain a diagnosis within 72 hours, which prevented the patient from continuing to propagate the disease; stool cultures were performed for old cases of typhoid fever in order to find healthy carriers serving as propagators of the disease; and an epidemiological history was drawn up for each possible or confirmed case in order to learn whether they had a connection with the breeding place of the infection.

When these first steps had been completed, the confirmed and possible cases were moved in order to guarantee adequate treatment. The children were

hospitalized in one place, and the adults in another. The dwellings involved were thoroughly disinfected with chlorine to protect other family members from the disease. Once it was known that the majority of the cases stemmed from ingestion of water contaminated with salmonella typhi bacteria, every effort was made to improve the quality of that precious liquid. To do that, the following plan was put into effect:

a. Selection of waste chlorine as the disinfectant to be used.

b. Nessler tests were performed. These indicated that the water may have been contaminated with human wastes.

c. Disinfection of cisterns and tanks in order to improve the quality of water contained in them.

d. A search for leaks in the water system and in buildings in order to eliminate them and avoid contamination.

e. Inspection of the sewer system to find obstructions and breaks in the pipes, because by overflowing and leaking they facilitate mixing of sewer water with drinking water.

f. Inspection of plumbing fixtures in buildings in order to learn their condition, eliminating interconnections and finding out which dwellings lack plumbing.

g. Checking for accumulated garbage, which facilitates proliferation of flies, cockroaches, and rats. These creatures help to spread disease, and thus it is necessary to remove the heaps of garbage in parks, vacant lots, streets, and shop spaces, whether in use or not, periodically checking collection and transporting of garbage in order to give the public better service.

To contribute to the control of pests (flies, cockroaches and rats), the following steps were taken:

a. Disinfection of shop spaces and other areas.

b. With the cooperation of mass organizations, use of poisoned bait to eliminate rats in shop spaces, whether in use or not, in public areas, at sewer gratings and drains.

c. Spraying pesticides to reduce the density of flies and cockroaches, using [words illegible] high-volume equipment.

In regard to monitoring food [sanitation], there are systematic inspections of places where food is stored, handled, distributed, and sold, in order to determine its condition, the health of those who handle it, the quality of the water, and methods of disposing of waste water and garbage, with suitable instructions being given in each instance.

Finally, we shall report that 340 comrades have taken part in this very thorough job of controlling the typhoid fever outbreak in the Municipality of Old Havana, working as members of the Red Cross, Civil Defense, and Committees for the Defense of the Revolution, as well as all the bodies that in one way or another are involved in the problem.

The Municipality's Community Services

The Board of Community Services has performed an extremely efficient job in sanitizing and cleaning the contaminated area. The statistics offered here correspond to the period of 16 to 28 July. [They used] 388 dump trucks, 4 flatcars, 48 heavy Volvos, and 38 power shovels. During this period alone, 1,956 trips were made with this equipment, and at least 11,815 cubic meters of debris was removed from Old Havana. Cleaning was carried out in 54 shop spaces, 20 apartment houses, 4 dwellings, and 12 vacant lots.

In this effort help was received from the Havana Truck Enterprise, the Youth Labor Army, the Provincial Road Unit, the ATM [expansion unknown], the Flour Enterprise, Provincial Military Enterprise Number 7, Freight Carrier, Domestic Trade, Light Industry, the INIT [National Institute of Tourism], the Municipal Military Committee, Civil Defense, and the mass organizations.

Activities Carried Out by Aqueduct, Sewer, Septic Tanks, and Storm Drain

Since the very instant in which the outbreak was confirmed, the workers and technicians from this provincial board have made an intense effort, laboring uninterruptedly night and day in the various roles corresponding to their respective responsibilities, performing three tasks at once: studying and identifying the problem and possible solutions, prevention and immediate partial sanitation, and [development of] an overall solution.

It was found that the main water system in the infected area was in generally good condition, but the branch pipes supplying water to houses were in very poor condition. Furthermore, the pipes within houses were in terrible condition. The sewer was generally unobstructed, although problems were found at certain points. On the other hand, sewer pipes within houses were, again, in very poor condition. Often drain pipes were blocked. A large number of unauthorized connections of sewage drains to the storm drain was found, as well as houses lacking plumbing fixtures and with discharges into the storm drains, directly into the street, or any place nearby.

As of 29 [July], 165 leaks had been fixed; 49 water connections had been replaced through the sweep plan [sic]; 137 domestic water systems had been thoroughly repaired; 389 plumbing fixtures had been installed; 309 cisterns had been disinfected (36 repaired); 1,325 laboratory analyses had been performed (ammoniac, nitrites, and waste chlorine), as well as 165

bacteriological [analyses]; the system had been continually chlorinated for 324 hours; 1,234 catch basins in the system of sewers, connecting pipes, and storm drains had been cleared by hand, and 565 by mechanical means; and, finally, 436,400 gallons of water had been served from barrels.

The course of action taken has been based on the following points:

1. Establishing a permanent rechlorination point through installation of a chlorine gas dispenser at [the intersection of] Corrales and Figuras. This dispenser guarantees continual chlorination of water supplied to all of Old Havana Municipality, as well as to a large part of Central Havana.

2. Permanent, systematic monitoring of water quality by taking samples and performing laboratory tests.

3. Progressive replacement of all defective connections in the infected area through the sweep plan.

4. Progressive repair of defective water systems in buildings in the contaminated area, and repair of critical cases in the municipality, that is, schools, apartment houses, etc.

5. Systematic cleaning and clearing of storm catch basins and sewer and storm systems.

6. Continued supplying of drinking water from barrels until the bacteriological quality of the water system is assured.

7. Maintenance and supervision of all sanitary measures prescribed.

As one can see, everything possible is being done to control and halt the outbreak of typhoid fever that is affecting a wide area of Old Havana. Science and technology, and the talent and selflessness of our specialized workers have once again been mobilized to improve the well-being of our people. But this is not and will not be enough if the entire public does not cooperate in strictly observing the regulations established for that purpose.

CUBAN REVIEW OF HYGIENE AND EPIDEMIOLOGY

Havana REVISTA CUBANA DE HIGIENE Y EPIDEMIOLOGIA in Spanish Jan-Apr 77 pp 37, 48, 62, 71, 76, 91-92

[English summaries furnished by source]

[Excerpts] Perez Lovelle, R. et al., "Relations Between Social Deviation and Contagious Diseases: A Preliminary Report," REV CUB HIG EPID 15: 1, 1977

The construction of socialism offers the possibility of eradicating the bad remainders inherited from the old society. Among the latter there is the social deviation known as delinquency. The deviation is a consequence of the division of society into antagonistic social classes; this phenomenon leads to the appearance of the so-called lazy, who manifests a series of deviated standards and values which are transmitted through socialization. After the analysis of Marxism classics and contemporary Soviet penologists a series of hypotheses is proposed in order to explain certain aspects of the above-mentioned phenomenon. Results of some preliminary investigations which agree with those hypotheses are exposed: a) a concentration of the phenomenon mainly in certain areas of the city has been detected; b) several types of problems are faced in those areas, i.e., delinquency, syphilis and other contagious diseases; and c) indicators common to the different problems have been found. The future development of the investigation as well as the practical recommendations that may be derived from it are analyzed.

Gonzalez-Gonzalez, E. A., "Digestive Tract Cancer Morbidity and Mortality in Cuba: A Preliminary Report," REV CUB HIG EPID 15: 1, 1977

The world incidence of digestive tract cancer as well as the magnitude of the problem represented by this localization in the people of our country are studied. A higher incidence of gastric cancer in the man (14.0/100,000 inhabitants/year) and large intestine cancer in the woman (7.0/100,000 inhabitants/year) is stressed. Correlations among the data from digestive tract cancer mortality rate during 1973 are studied. The prospects of the epidemiology of these malignant tumors within the frame of the National Program against Cancer are analyzed.

Calvino del Rio, A. et al., "A Preliminary Study on Bagassosis," REV CUB HIG EPID 15: 1, 1977

An epidemiologic study on bagassosis was started at the "Damuji" cane bagasse paper factory. An inspection of the center was made in order to determine high risk works, non-efficient protection against work environment pollution and protection measures aimed to avoid this risk in workers. Patients who had a positive diagnosis of bagassosis during the last two years are analyzed, and clinical, radiological and anatomicopathological

pictures--the latter in a dead patient and also in another one who underwent pulmonary biopsy--are studied in detail. Some significant suggestions that should be considered before establishing the definitive measures at the end of the study are pointed out. This paper is intended to promote in other work teams the investigation on this disease and also to put physicians on guard on the existence and frequency of this entity.

Calvino del Rio, A. et al., "Chronic Mercury Poisoning. Risks in a Plant for the Treatment of Rice Seeds," REV CUB HIG EPID 15: 1, 1977

Mercury concentrations were determined in the work atmosphere and workers underwent medical examinations and laboratory tests including the urinary excretion of mercury. It is confirmed that air mercury is a real risk and also that it deteriorates the health of the workers exposed. One worker had a chronic mercury poisoning. Relations between the work and the possibility of disease among these workers are pointed out. Causes that induce metal levels over those permissible are pointed out, and the way of reducing them to accepted levels in the air is explained.

Romero, M. de la C. et al., "The Importance of the Presentation of Diet to Patients," REV CUB HIG EPID 15: 1, 1977

Health concept is defined and the significance of the application of dietetics for preserving or recovering health is stressed. The psychological influence of food and its presentation on the patient is analyzed. Most frequent complications found in our units are pointed out, and educative activities are proposed for their solution.

Aguero Bello, N., et al., "Necroscopic Study of Diabetes Mellitus in a Region. A Review of Six Cases," REV CUB HIG EPID 15: 1, 1977

Eighty-five necroscopic reports of dead diabetics are reviewed and the age, sex, death causes, geographic distribution in a region, age of appearance of the clinical picture as well as the insulin dependence are analyzed. A new casuistry on diabetic's mortality rate that was made in a non-specialized institution is presented. The early detection of feminine renal sepsis at a latent stage could improve the prognosis in these patients.

Fernandez Gonzalez, M. H. et al., "A New Method for the Determination of Hydroxyproline. Study of the Oxidation Reaction With Periodic Acid," REV CUB HIG EPID 15: 1, 1977

Data of the study of the oxidation reaction between hydroxyproline imino acid and the oxidizing agent periodic acid in an acid medium are reported. The influences of the acid concentration, temperature, agitation time, and velocity and rest time of the chromophore-formating reaction on the sensitivity and reproductivity of results are proved. A modification of the original method, appeared in medical literature, for the determination of

hydroxyproline using periodic acid is suggested, and a new determination technique which yields good sensitivity and reproductivity and also can be performed before twenty minutes is proposed.

DIARRHEIC DISEASE PROMPTS WARNING TO HAVANA RESIDENTS

Havana JUVENTUD REBELDE in Spanish 18 Jul 77 p 1

[Excerpt] The Provincial Health Department has alerted the residents of Havana to the increase in diarrheal diseases which traditionally occurs during the summer months and to the additional sanitary measures that must be followed by various groups and all the residents of Havana to keep the situation under control. An outbreak of this type can occur anywhere in the city if all measures are not taken to prevent it.

The Departments of Health, Aqueducts, Sewerage and Storm Drainage and others have undertaken measures within their particular jurisdiction but greater cooperation from residents of Havana is indispensable. All residents are required to comply with the following sanitation measures:

1. All water to be used for human consumption must be boiled.

2. Extra efforts must be made to comply with sanitary measures regarding food handling. Hands must be washed before food is touched and the food must be covered to protect it from insects which could contaminate it.

3. Trash of any kind must not be disposed of in public areas, uninhabited places and so forth to prevent the accumulation of garbage which can become breeding places for the disease.

4. All cisterns, tanks and any other receptacles that are used to store drinking water must be thoroughly cleaned.

In Old Havana, where there is an outbreak of typhoid fever, these measures must be further intensified to prevent the spread of the disease. The Executive Municipal Committee together with the Provincial Departments of Popular Power mentioned earlier is conducting the work necessary to control and eradicate this outbreak.

In this particular case, it is necessary that any person or persons having a stand within Old Havana must immediately clean and disinfect it. Once this is done, the Old Havana Executive Municipal Committee of Popular Power located on 257 Prado on the corner of Animas, must be notified. Many of these places are considered to be likely breeding places for the disease and not one must go without cleaning. If any of the owners do not file a report, the Executive Municipal Committee will take the steps it feels are necessary in each case.

In addition, because of the problems caused by heavy transport vehicles on underground water systems--breaks in the pipes lead to the contamination of the drinking water--heavy vehicles will not be permitted on these roadways and the corresponding steps will be taken by the appropriate officials.

This situation also applies to the other districts in Havana and, therefore, it is necessary for all departments to adopt the measures necessary to keep these vehicles off those streets which cannot support their weight.

INSTITUTE FOR HEALTH DEVELOPMENT INAUGURATED

Havana Domestic Television Service in Spanish 0000 GMT 7 Sep 77 FL

[Text] With PCC Politburo members Pedro Miret Prieto and Jose Ramon Machado Ventura in attendance, the Institute for Health Development was inaugurated today. Also present in the ceremony were Vice Prime Minister Flavio Bravo and Faustino Perez, both members of the PCC Central Committee, as well as PCC Central Committee alternate member Jose Antonio Gutierrez Muniz, minister of public health.

The main function of the Institute for Health Development is the creation of a highly specialized group in methodology of scientific research work applied to health problems in their biological and social aspects. To this end, the center has the directorates of research work and training, the data processing center made up of the departments of preparation of data, planning and analysis of systems and the directorates of administration and general affairs. A total of 102 workers, 46 of them university professionals and 56 intermediate level technicians, make up the institute's roster.

This institute has the first data processing center of the Ministry of Public Health which will be the cornerstone for the development of the electronic data processing technology in the health sector. Fifteen university graduates will be assigned to the institute for a period of 10 months, during which time they will train in health administration, biostatistics, epidemiology, demography, social sciences and electronic data processing.

PUBLIC HEALTH MINISTRY REPORTS DENGUE OUTBREAKS

Havana Domestic Service in Spanish 1100 GMT 28 Sep 77 FL

[Text] The Public Health Ministry [MINSAP] has announced that an outbreak of the mild disease known as dengue has been detected in Santiago de Cuba City and in the area of Wajay, Havana City. It further reports that this is a virus which is milder than the grippe and which has been known for

many years. It has shown up as epidemic outbreaks in different parts of the world, including Cuba, the MINSAP announcement points out. The dengue is characterized by a sudden onset of high fever accompanied by headache and muscular and joint pains and in some cases a rash similar to that of the measles. The feverish stage lasts about 7 days and disappears without leaving traces. It has no specific treatment and it is recommended that aspirins and other types of analgesics be taken for pain and lots of fluids be consumed.

This disease is transmitted by mosquitoes of the genus Aedes and, because of this, it must be combated by adopting controlling measures aimed at stopping the proliferation of the carrier. Health authorities are adopting pertinent measures.

CYPRUS

'BOZKURT' REPORTS DISEASE IN TURKISH REGION

Nicosia BOZKURT in Turkish 27 Sep 77 pp 1, 4 NC

[Excerpts] For weeks now an unknown disease has been causing havoc in the Turkish region of Cyprus. The people call it "the rag disease" because those affected become like a rag. In most cases, the methods used by our doctors have been ineffective.

The fact that some symptoms of the disease are similar to those of cholera increases people's fear and is the reason they describe it as "light kind of cholera." Despite the spread of this "rag disease" our Ministry of Health has so far made no statement about its nature and causes.

Nicosia BOZKURT in Turkish 28 Sep 77 p 1 NC

[Summary] Lefkosa [Nicosia]--In connection with a report in BOZKURT on 27 September, the Ministry of Health of the Turkish Federated State of Cyprus [TFSC] has announced that the so-called "rag disease" is a type of influenza caused by a virus.

The statement issued by the Ministry of Health says that there is no similarity between cholera and the "rag disease." As has been stated before, there is no cholera in the Turkish Federated State of Cyprus.

STATE OF PUBLIC HEALTH SYSTEM REVIEWED

West Berlin DIW WOCHENBERICHT in German Vol 44, No 32, 11 Aug 77 pp 280-284

[Article by Maria Elisabeth Ruban]

[Text] The GDR public health system bears the stamp of the former German Reich's health policy and the Soviet Union's example. While imitation of the Soviet model is seen primarily in the hierarchical grouping and central organization of health policy institutions, elements of the German system that have been retained can be found in the attachment to a certain measure of responsibility and decisionmaking on the part of the individual. The GDR is the only CEMA country in which more than half of the expenses for public health are paid out of social insurance funds, whereby half of the contributions paid in come from direct deductions from the wages of those insured and half from taxes paid by the enterprises--this is also unique within CEMA. In the other CEMA member nations these premiums are paid exclusively by the enterprises.[1] The introduction of a "voluntary supplementary pension" in 1968--improvements were made in 1971 and 1977--made it possible for those GDR workers with a monthly income of more than 600 marks to make larger contributions--50 percent coming out of their own income in this case as well--thus allowing them to claim a higher old-age or disability pension or, in case of illness, an increased amount of sickness compensation. This shows that the principle of making the size of certain social payments contingent upon the amount of the insurance premium has not been abandoned.

It is true that the total amount of expenditures for health care and social security (including all pension payments) is not tied to the size of social insurance fund receipts. The 1975 expenditures (FDGB social insurance and state insurance) of 21.4 billion marks were almost 5 times as high as in 1951, but social insurance premiums increased by only 2.5 times because the premium rates remained unchanged (as a rule, 10 percent of gross wages up to an assessment limit of 600 marks each for every employee and his employer). The increasing difference between proceeds from social insurance premiums and expenses is being borne by the state treasury, a situation which definitely means that the traditional principle of insurance is being watered down more and more. While in 1951 social insurance expenses were still being financed completely out of premiums, budgetary supplements to overall outlays for the public health system (including pensions) amounted to a 42-percent supplement according to the latest available figures, which are for 1975.

---

[1]Michael Kaser, "Health Care in the Soviet Union and Eastern Europe," London, 1976, pp 147, 148.

Organization and Facilities

In the GDR health and illness are not regarded as a private matter but as social phenomena which the state has a legitimate interest in influencing (Lenin: "Health is a valuable public property."). Each individual is of course called upon to help preserve and improve this "property." He should recognize "that the human being has the ability to prevent or control illnesses" and that health is "also the result of a learning process."[2] The state helps him in this by providing intensive health education and propaganda (instruction on how to live a healthy life) and by providing a system of health facilities available to all citizens free of charge. This system is arranged by territory and specialty and provides the most complete coverage possible of the entire population--with special attention to high-risk groups--in the areas of prevention, therapy and aftercare.

Inpatient Care

In 1975 there were 577 hospitals in the GDR with about 182,000 beds, which amounts to 108 beds per 10,000 inhabitants (the figure is 118 for the Federal Republic). As a result of the consistent process of concentration, the number of hospitals in the GDR is steadily declining. The average size of hospitals in the GDR (316 beds) is substantially larger than in the FRG (195 beds). Since 1965, however, the total number of beds has steadily been reduced. This is being done in line with lessening demand, which on the one hand is traceable to the decline of certain infectious diseases (primarily tuberculosis) but also to the declining population and the increasingly shorter periods of hospitalization per patient. The hospitals are not all on the same level in terms of their medical capacities and technical equipment. As a rule--judging by the state of medical science--there is a higher medical level at university clinics, scientific institutes with hospital facilities and bezirk hospitals, of which one of the latter is the leading medical institution for inpatient care of the population in its respective territorial sector. There are still, however, considerable deficiencies in the outfitting of medium-size and small hospitals, primarily those in rural areas. These deficiencies lie in room accommodations for patients, furnishings and technical equipment as well as in the supply of medications and auxiliary medical supplies. A private sector has managed to maintain itself--under state supervision--within the inpatient sector. In 1975, 94 nonstate hospitals with more than 13,000 beds were still operating, most of which were denominational establishments.

---

[2]D.G.R. Findeisen, "Are Heart Attacks the Fate of Managers?" DIE WIRTSCHAFT, No 7, 1974, p 18.

Table 1. GDR Public Health Hospitals and Employees

	1950	1955	1960	1965	1970	1975	1976*	1950	1955	1960	1965	1970	1975	1976*
	(1) Anzahl der Einrichtungen							(2) Je 10 000 der Bevölkerung						
Zahl der Krankenhäuser (3)	1 063	903	822	757	626	577	.							
Betten in Krankenhäusern (4)	187 219	202 401	204 767	206 154	190 025	182 220	180 466	102	113	119	121	111	108	108
Ärzte (5)	13 268	13 755	14 555	19 528	27 255	31 810	33 560	7,2	7,7	8,5	11,5	16,0	18,9	20,0
Zahnärzte (6)	7 176	7 259	6 361	6 207	7 349	7 968	8 300	3,9	4,1	3,7	3,6	4,3	4,7	4,9
Apotheker (7)	2 621	2 281	2 240	2 638	2 885	3 442	.	1,4	1,3	1,3	1,5	1,7	2,0	.

*Preliminary figures.
Sources: 1977 Pocket Book of GDR Statistics; The GDR Public Health System in 1976.

Key:
1. Number of facilities
2. Per 10,000 people
3. Number of hospitals
4. Hospital beds
5. Physicians
6. Dentists
7. Pharmacists

Outpatient Care

The GDR has largely copied the Soviet model in building up its system of outpatient care. Since 1947, polyclinics and outpatient clinics have been established in all urban and rural kreises as the most important sources of outpatient care. Their number and average treatment capacity are steadily increasing. Polyclinics operate as independent organizations or as hospital affiliates, or they are affiliated with a production enterprise. They are supposed to have at least five medical specialty departments, one dental department, a pharmacy and physical therapy facilities. Outpatient clinics are smaller facilities which are supposed to carry at least two medical specialty departments and one department of dentistry; they also operate independently or in affiliation with a hospital or enterprise.

A specific form of the GDR public health system's outpatient sector is the state medical and dental practice, instituted in 1956. State medical practices are found predominantly in rural areas and are most often operated by older physicians whose private practices were taken over by state management. The advance of state practices has been accompanied by a gradual phasing-out of private medical and dental practices. In addition to the aforementioned facilities, there are other forms of ambulatory care; for example, dispensaries staffed by physicians, nurses or nurses belonging to religious orders. As a rule these are attached to polyclinics or outpatient clinics. In 1975, patient consultations were broken down as follows in the state outpatient sector:[3]

[3]1976 GDR Statistical Annual, p 379.

Polyclinics	55.8%
Outpatient clinics	22.7%
State medical practices	16.6%
Dispensaries staffed by physicians	4.9%
	100%

The GDR has an extensive system of enterprise health care whose facilities are operated as polyclinics, outpatient clinics or physician-dispensaries depending upon the size of the enterprise. The work of enterprise physicians is not limited to industrial medicine and hygiene. They also treat illnesses (some enterprise polyclinics have their own hospital-care facilities) and handle preventive care--a highly promoted practice in the GDR--(regular examinations, mass immunizations, for example) and aftercare (care of the chronically ill, for example).

Table 2. GDR Facilities for Outpatient Care

	1950	1955	1960	1965	1970	1975	1976*
	(1) Anzahl der Einrichtungen						
Polikliniken (2)	184	369	399	412	452	522	534
Ambulatorien (3)	575	720	766	855	828	929	947
Landambulatorien (4)	136	299	373	376	378	393	398
Betriebsambulatorien (5)	109	157	177	223	243	290	306
Arzt- und Sanitätsstellen (6)	-	1 695	1 964	1 866	2 067	2 051	.
Staatliche Arztpraxen (7)	.	.	298	787	1 301	1 606	1 622
Staatliche Zahnarztpraxen (8)	.	.	156	485	680	946	998
Ärzte in eigener Niederlassung (9)	.	5 048	3 253	2 524	1 888	1 308	.
Zahnärzte in eigener Niederlassung (10)	.	5 552	4 010	3 140	2 391	1 617	.

*Preliminary figures.
Sources: 1977 Pocket Book of GDR Statistics; The GDR Public Health System in 1976.

Key:

1. Number of facilities
2. Polyclinics
3. Outpatient clinics
4. Rural outpatient clinics
5. Enterprise outpatient clinics
6. Dispensaries with and without physicians in attendance
7. State medical practices
8. State dental practices
9. Physicians in private practice
10. Dentists in private practice

Medical Personnel

The only public health employees classified separately as professional groups are those skilled personnel who hold advanced degrees; that is, physicians, dentists and pharmacists. All others are grouped together statistically as technical staff with technical school degrees, with master's or skilled worker's certificates or as semi- and unskilled personnel.

In the case of advanced school graduates, it is primarily the figures on the number of physicians in the last 25 years that gives a vivid picture of the GDR's problems--prior to 1961--with increasing the small number of physicians. On a per capita basis, in 1950 the FRG had twice as many physicians as the GDR. It was only after construction of the Wall had forcibly stopped the flight by physicians that the GDR was able to equalize this quantitative lag.

Physicians per 10,000 Inhabitants

	GDR	FRG
1950	7.2	13.5
1965	11.5	14.5
1970	16.0	16.3
1975	18.9	19.3

The effort to increase the number of physicians evidently caused the training of dentists to be neglected for a long period; their number decreased even after 1961, and only in 1970 did it exceed the level of 1955. Even today dental care remains one of the problems of public health to which only unsatisfactory solutions have been found.

Findings

The effects of health policy measures on the health of the people are difficult to quantify. Health and illness are also determined by personal lifestyles and are evaluated from different subjective points of view. In general, the demand for health care increases with rising prosperity. In the GDR as well as in other industrialized countries, the average number of consultations per capita is steadily increasing.

Similarly, in all industrial countries there is evidence of typical changes in the incidence of certain diseases: Infectious diseases are being increasingly circumscribed; diphtheria, measles and poliomyelitis have become practically insignificant; tuberculosis has been reduced to a remarkably low level. In contrast, there has primarily been an increased incidence of cardiovascular disease, cancer, diabetes and back problems, as illness typical of civilization and prosperity. Noteworthy are the advances that have been made in the case of some basic data on population and health policy, in particular the successes achieved in increasing the average life expectancy. Between 1952 and 1974 it was raised by 5 years to the age of 69 for males and by 6 years to the age of 74 for females.[4] The increased life expectancy is based on reduced mortality in all age groups but primarily on the impressive decline in infant mortality to nearly one-fifth of the 1950 level.

[4]1976 GDR Statistical Annual, p 424.

Deaths per 1,000 Live Births in the First Year of Life[5]

1950 = 72.2
1960 = 38.8
1970 = 18.5
1975 = 15.7
1976 = 14.1

Life expectancy and infant mortality are indices which correlate to a great degree with the economic development of a country, the standard of living of its people and the scope of its public health system. The levels attained in the GDR are very favorable, especially in the case of infant mortality. The GDR is surpassed in this regard only by a few (Scandinavian, for example) countries. These successes may be attributed in large measure to the fine-meshed network of facilities devoted to prevention, early detection and aftercare as well as to the gentle pressure exerted on the citizen to make use of these facilities. Thus, receipt of child-support payments--1,000 marks for each birth--is contingent upon proof of having kept the prescribed regular pre- and post-natal appointments with a physician.

In an overall assessment of the accomplishments of the public health system, one must differentiate between the institutional framework on the one hand (system and organization) and the material and manpower situation of the facilities on the other. The aforementioned high priority assigned by the GDR public health service to measures aimed at prevention and early detection has led to a wide-ranging immunization of the people and a correspondingly lower level of morbidity in the case of certain infectious diseases. Measures designed to prevent disease and provide for early detection are also offered in countries in which the public health system is organized predominantly along the lines of private enterprise, but it seems here that a centrally controlled public health system organized by the state is superior.

The wide variety of forms of outpatient treatment and accessibility to inpatient facilities constitute an additional advantage of the system as developed in the GDR. A visit to a polyclinic in which physicians specializing in different areas practice side-by-side, supported by a common system of X-ray and laboratory diagnostic facilities, at least spares the patient from the annoying referral procedure and shortens the process of diagnosis and therapy.

In practice, however, such--potential--advantages are neutralized by numerous deficiencies and inadequacies with regard to personnel and technical equipment. For instance, laboratory and X-ray diagnostic facilities are considered a "bottleneck in outpatient care," and there are complaints about the too lengthy process of obtaining and disseminating results as

[5]1977 Pocket Book of GDR Statistics, p 146.

well as about the consequences thereof: "The quite costly effects are waiting periods for the citizens, delayed treatment of the causes of illness, lost time in production, the still unnecessarily long stay in hospitals and lengthy periods of disability."[6]

Also unsatisfactory is the situation as regards the inpatient sector, at least insofar as those hospitals are concerned which do not function as "leading clinics" in their regions, as do university clinics, bezirk hospitals and sometimes kreis hospitals as well. These smaller, lower level hospitals are often very limited in terms of space and are therefore overcrowded. Their technical equipment is obsolete and they are short on nursing staff and auxiliary personnel. It is therefore not uncommon for the patients themselves to assume some of the lighter duties (the serving of meals, for example).

Funds from the state treasury dominate--a condition inherent in the system--the financing of the GDR public health system. The citizen's direct contribution to public health costs is relatively small. With a maximum outlay of 60 marks per month (excluding voluntary supplemental insurance) every employee has complete insurance protection, including an old-age pension. In the public health sector this means that the patient, free of charge, has access to all outpatient and inpatient facilities, is supplied with medications and auxiliary medical aids, and is sent away for cures, therapy and the like. The patient "pays" for all this by having to put up with many inconveniences such as long waits (in the case of dental treatment and certain surgical procedures in particular) and with the lack of comfort in hospital accommodations and support facilities.

Given these advantages and disadvantages of the public health system, it is difficult to make a definitive judgment. Pertinent in this regard is a remark found in a study by the GDR journal, SOZIALISTISCHE FINANZWIRTSCHAFT:[7] "The criterion for the quality of the public health system is the judgment of the citizen"; the journal does not, however, give any information concerning this judgment. As far as the scant available data (density of physicians and hospital beds, morbidity and mortality) permits a comparison with the FRG, it is evident that the substantial GDR lag in economic productivity and overall standard of living does not exist in the field of public health. On the contrary, the findings on health care for the people are on a level that can certainly compare with that of the Federal Republic.

---

[6]Christa Sladczyk, "Economy in the Public Health System: For Improved Medical Care," SOZIALISTISCHE FINANZWIRTSCHAFT, No 1, 1973, p 45.
[7]Christa Sladczyk, loc. cit., p 45.

FRANCE

RABIES SPREADING TOWARD SOUTH-CENTRAL DEPARTMENTS

Paris LE MONDE in French 28-29 Aug 77 p 6

[Article by C. B.]

[Text] Rabies made its reappearance in France in 1968, in the northern and eastern parts of the country, and has been spreading at the rate of about 30 to 40 kilometers per year. On 30 December 1976, the JOURNAL OFFICIEL published a list of 36 departments "stricken or threatened by rabies" (1 January 1977 edition of LE MONDE). Today, the Ministry of Health has announced the appearance of the disease in two new departments: Ain and Nievre.

It should be pointed out that the carriers of the epidemic are primarily foxes and some other wild animals such as the badger, stone marten, pine marten, roe deer and so forth. Consequently, the systematic killing of foxes, which sparked a certain amount of protest (8 March edition of LE MONDE), is being continued. But that does not mean that we can ignore preventive measures, the most important of which is most certainly vaccination. The general opinion is that human vaccinations should be reserved for individuals who are more highly exposed (farmers, forest rangers and so forth). On the other hand, the vaccination of domestic animals (dogs and cats) is imperative whenever the animal is liable to be taken into a contaminated zone (hunting, vacationing or camping). And the ministries of health and agriculture are stressing the necessity to vaccinate all cattle.

These ministries are also advising people on what to do in case they are bitten by an animal who might be infected: try to identify and, if at all possible, catch the animal so that a definite diagnosis can be made through laboratory analyses; inform the departmental veterinary services of the body of any animal suspected of carrying the disease; thoroughly wash the wound, preferably with soap; immediately consult a physician, who will begin antirabies treatment. There are presently 30 antirabies treatment centers in France, and it is the Ministry of Health's objective to set up one per department.

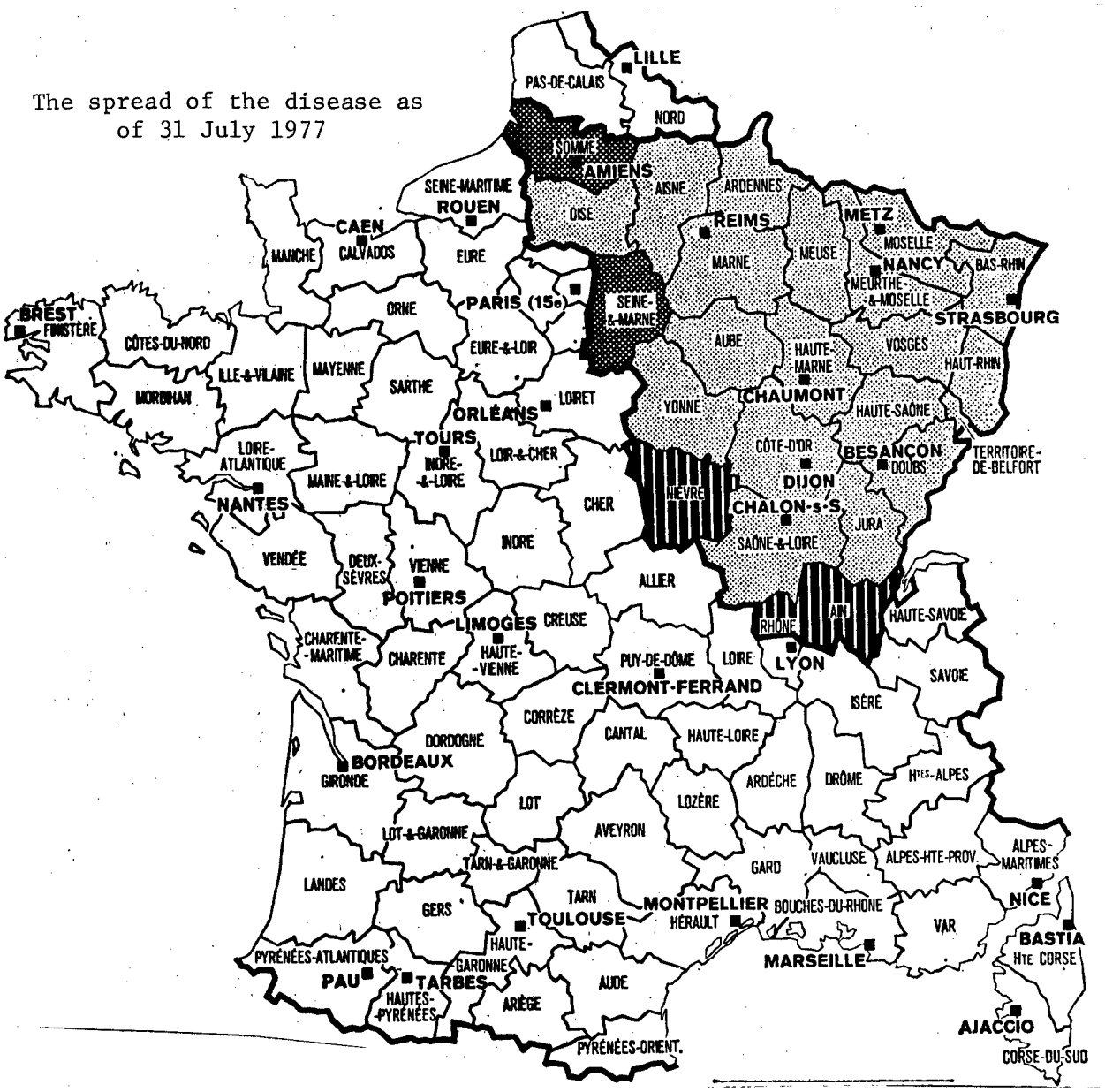
Since the reappearance of the disease, the only fatal cases of rabies have been cases imported from abroad. Five were reported in 1976 (two from Algeria, two from Gabon and one from Morocco) and two in 1977. The most recent case is that of a young Moroccan, who died on 20 August at the Claude-Bernard Hospital in Paris. He had been bitten in Fez, Morocco, on 13 July, and had been treated too late.

The new outbreak of rabies is of great concern to international health officials, and the WHO plans to hold a meeting in Frankfurt in November which will be specially devoted to this problem.

Following Its Progression

The epidemic has struck two new departments.

The spread of the disease as of 31 July 1977



Source: Ministry of Health

■ Antirabies treatment center
▩ Departments affected by the disease in 1976
▮▮▮ New departments affected as of 31 July 1977

TETANUS, YELLOW FEVER, MEASLES VACCINATION CAMPAIGN

Bissau NO PINTCHA in Portuguese 30 Jul 77 p 5

[Text] The massive vaccination campaign to administer the third dose against tetanus, yellow fever and measles to children of up to 9 years of age will begin in the Belem section about 1500 hours on 6 August, according to the General Directorate of the Hygiene Service and the Service to Combat Large-Scale Endemic Diseases. In view of the great importance of that vaccination, these services request the parents and relatives of children who have already been vaccinated with the first and second doses in April and June to take them to the usual locations for that purpose.

Vaccination is one of the most effective techniques of preventive medicine, but it still is not available to all the children of the world.

Dr Halfdan Mahler, general director of the WHO, underscored that vaccination has been very successful in many countries in the past 50 years, particularly in combating diphtheria (formation of false membranes on the mucous surfaces, particularly in the mouth, the throat and the skin), whooping cough (convulsive cough), infantile paralysis and measles. On the other hand, vaccination against tetanus and the infant types of tuberculosis has almost eliminated these diseases.

According to the statements of the head of the WHO, there are still many things which can be done. It is possible to improve the health-care systems in order to provide immunization (the effect of resisting certain diseases) jointly with other effective routine services to mothers and children. Those services could be expanded in order to cover the rural population and the more deprived communities.

Halfdan Mahler acknowledges that the problem is not mainly medical in nature. The knowledgeable cooperation of the people, the raising of funds and the effective bolstering of the basic health services are tough requirements, but they can be attained and can produce many good results. The control of infectious diseases constitutes an essential condition for the social and economic development of a country. And when that control manages to lower the infant mortality rate of a given country (which is minimal under 1 percent and high over 2 percent), the level of social development has been improved. The fight is still in the initial stage in our country, but positive results have already been registered.

LEPROSY CASES

Bombay THE TIMES OF INDIA in English 29 Jul 77 p 15 BK

[Text] New Delhi, July 28--Tanil Nadu had the maximum number of leprosy cases detected as of March 31, with over 560,000 persons afflicted with this disease. The minister for health and family welfare, Mr Raj Narain, told Mr S. S. Somani that Andhra Pradesh came next with 300,000 cases of leprosy. Maharashtra had 260,000 cases, West Bengal 240,000 cases and Bihar 120,000 cases. For the entire country, about 2 million cases of leprosy had been detected, of whom over 1.5 million persons were being given treatment, he added.--SAMACHAR.

KALA-AZAR OUTBREAK WITH LARGE DEATH TOLL

Calcutta THE STATESMAN in English 27 Aug 77 p 1

[Text] New Delhi, Aug. 26--The World Health Organization is sending $80,000 worth of special drugs and medical experts from Geneva to Bihar, where several villages are in the grip of kala-azar, reports SAMACHAR.

Over 100,000 cases have already been detected and the disease is spreading, according to a health team that has returned from an on-the-spot study.

Dr V. T. H. Gunaratne, director of the WHO's regional office here, said that the organization had arranged for the immediate supply of drugs which "are either not available or are in short supply in India to combat the disease which has reappeared in a big way after several years."

He said the disease "may peak at 200,000 cases" and might take two to three years before it is controlled. He described it as an "outbreak" and not an "epidemic."

Dr Gunaratne met Health Ministry officials yesterday and after consultations asked WHO headquarters in Geneva to send an expert.

He said that treatment of kala-azar cases must be given first priority followed by the destruction of sandflies, which spread the disease.

"Inadequate"

The "pentavalent antimony compound," which is the traditional drug for kala-azar is made only in three firms in India and their production is inadequate. But 10 percent of the cases do not respond to this drug, Dr Gunaratne said. WHO has placed an order with European firms for the immediate supply of 20,000 ampoules of the drug pentamidine.

He said 2,000 ampoules had arrived yesterday and the rest would reach India before January. In addition to this, WHO had ordered from France 80,000 ampoules of antimony compound, but according to Dr Gunaratne, even this may not be sufficient.

He said that health officials, drug producers and WHO scientists would meet in Patna to discuss ways for increasing the production of antimony drugs in the country. The organization would provide all assistance for securing raw material.

Meanwhile, WHO has suggested DDT spraying in houses in the affected areas since this is the only way of destroying sandflies.

There are over 500 species of sandflies, but only a few of them spread kala-azar. In India there are six species of sandflies the predominant among them being "phelbotomus argentipes."

Smaller than mosquitoes and preferring a warm humid climate, these sandflies breed in soil and litter and live in crevices and "microhabitats" in houses. Some sandflies live in caves and last year one such sandfly was discovered in Orissa.

Kala-azar affects the visceral organs such as spleen and liver and runs a slow, progressive course lasting from 18 months to three years ending in death.

The disease is caused by a parasite called "leishmania donovani" which is injected into the blood when a sandfly bites. They usually bite at night and two bites are enough to infect a person.

It has been found that a person who recovers from an attack of kala-azar becomes immune to further attacks.

New Delhi PATRIOT in English 28 Aug 77 p 4 BK

[Excerpt] WHO is rushing 80,000 dollars worth of special drugs and medical experts from Geneva to Bihar where a few villages are in the grip of kala-azar, reports SAMACHAR. Over 100,000 cases of kala-azar have already been detected in Bihar and the disease is spreading, according to a health team that has returned from an on-the-spot study. Dr. V. T. H. Gunaratne, director of the WHO's regional office in Delhi said that WHO has arranged for immediate supply of drugs that are either unavailable or in short supply in India to combat kala-azar which has reappeared in a big way after a spell of several years.

Calcutta THE STATESMAN in English 5 Sep 77 p 7

[Text] Patna, Sept. 4--The Union Minister of State for Health, Mr Jagadambi Prasad Yadav, said here today that according to reports received so far about 2,000 people had died of kala-azar and 200,000 had been affected by the disease in Muzaffarpur, Vaishali, Sitamari and Samastipur districts in north Bihar, says SAMACHAR.

He told reporters before leaving for Delhi that a "composite survey" would be taken up in Bihar to ascertain and control the incidence of kala-azar, leprosy, tuberculosis and malaria.

He said 10 to 15 percent of the Harijan population in the villages of Bhagalpur and Santhal Parganas were suffering from the disease. He feared that people in other districts also might be affected.

Mr Yadav said the Centre would provide the State with financial assistance for controlling kala-azar. More than 25 percent of the biri workers in Monghyr district were suffering from TB. The construction of a 20-bed ward for leprosy patients had been sanctioned. The ward would be attached to the Dumka hospital. The expenditure on the staff would be provided by the Union Government.

The project involved a non-recurring expenditure of Rs 1 lakh and a recurring expenditure of an equal amount.

The Union Government had also sanctioned funds for a 20-bed ward to be added to the Monghyr District Hospital.

Calcutta THE STATESMAN in English 16 Sep 77 p 9

[Text] New Delhi, Sept. 15--An expert group on kala-azar which met here at the Indian Council of Medical Research has observed that the resurgence and spread of kala-azar in the country is taking a serious turn, reports SAMACHAR.

The group has strongly recommended that in addition to the supplies of drugs by the World Health Organization, the Drug Controller of India may be asked to make necessary arrangements for the manufacture of the drugs in the country itself.

The meeting, chaired by Dr P. C. Sen Gupta of the School of Tropical Medicine, Calcutta, and attended by 14 experts expressed concern over the development of resistance to conventional antimony drug.

According to a survey conducted by the National Institute of Communicable Diseases in August this year, in Bihar there were about 70,000 cases of kala-azar which resulted in about 4,000 deaths in the districts of Vaishali, Muzaffarpur, Samastipur and Sitamarhi.

In the rest of Bihar, it is estimated that there could be another 30,000 cases.

The group has recommended that DDT should be sprayed in the affected houses and villages up to a height of five feet.

The group has also suggested that the kala-azar affected areas should be identified quickly with the assistance of the State health network.

Dr Jugal Kishore, president of the Central Council of Homoeopathy and homoeopathic adviser to the Government, said today that the homoeopathic system would be effective in treating kala-azar.

He said a team of doctors had gone to Muzaffarpur and other areas in Bihar to study the feasibility of introducing homoeopathic treatment on a large-scale to control the disease.

Warsaw ZYCIE WARSZAWY in Polish 16 Sep 77 p 1

[Text] Delhi (PAP)--Approximately 4,000 persons have died during the month in India from the tropical fever called kala-azar. That illness is spreading in the northeastern part of the republic. According to the communique of the National Institute of Contagious Diseases, in four districts of the state of Bihar approximately 70,000 cases of this disease were noted and 30,000 in the other districts of that state. The kala-azar epidemic decimated the population of the eastern part of India 30 years ago. It was almost completely eliminated in the 1960's.

MALIGNANT MALARIA OUTBREAK

New Delhi INDIAN EXPRESS in English 19 Aug 77 p 7 BK

[Text] Gurgaon, Aug. 18--Malignant malaria has broken out in an epidemic form in the deluge-hit Mewat, particularly in the Hathin Sub-Tehsil of Gurgaon District. The disease has already claimed several lives, both in the villages and towns.

According to local legislators, sarpanches and social workers, on an average 10 persons die due to "malignant malaria" and other water-borne diseases, including cholera and jaundice.

The authorities admit that the "incidence of various water-borne diseases is on the increase," yet they insist that "there is no epidemic in the district excepting that malaria is widespread and has taken some lives as well."

The Deputy Chief Medical Officer (Health), Dr Randhir Yadav, claims to have only "heard" about some stray cases of jaundice and acute dysentery, which, according to him, cannot be described as "epidemic."

The Deputy Commissioner, Mr Naseem Ahmed, "fears" that an epidemic may overtake the flood-stricken areas any moment, but has no knowledge of any epidemic so far both in Mewat and Daultabad-Dharampur sector.

Mr Ahmed has alerted the Chief Medical Officer of Gurgaon to intensify the preventive operations to avert the outbreak of epidemic.

According to the Janata Party MLA [member of legislative assembly] from Hathin, "four young men (in the 15-25 age group) died of malignant malaria in Hathin Town on August 15 last; another three persons died of the same fever and the same day in nearby Malai Village, the 16-year-old daughter of an Uttawar village moneylender died a day later due to cholera."

Local doctors and Hakims confirm that flood-stricken villagers are dying due to "high fever and loose motions and the epidemic is no longer confined among the infants."

The District Malaria Officer, Dr D. V. Khosla, says that "there is no shortage of antimalaria drugs" and that mass antilarvae measures were afoot in all the marooned villages. But the malaria workers say that they were under instructions "not to give more than 100 chloroquin and other antimalaria tablets in one village in 1 week."

A fatal epidemic is ravaging Mewat's cattle wealth. Although the authorities deny more than 300 deaths of animals in the whole of Gurgaon District ever since the floods came, one doesn't have to exert much to verify what the villagers and legislators say about the extent of epidemic.

Madras THE HINDU in English 11 Sep 77 p 14

[Text] New Delhi, Sept. 10--Ten lakh tablets of primaquine to check rapidly increasing cases of relapse of malaria have been released in the main markets of the country through the Indian Drugs and Pharmaceuticals Limited (IDPL).

Primaquine is the only medicine which prevents relapse of malaria. Its sale is restricted because of the side effect the medicine might have in some cases.

Doctors specialising in malaria treatment have advised the patients to take primaquine in consultation with medical authorities.--SAMACHAR.

INDONESIA

WEST JAVA SMALLPOX EPIDEMIC

Hong Kong AFP in English 1258 GMT 9 Sep 77 BK

[Text] Jakarta, Sep 9--The official Armed Forces Bulletin said here today that a number of people have been affected by a smallpox epidemic that hit the Kuningan district in West Java. The report said at least two villages were affected by the disease. The bulletin said both children and adults were suffering from the smallpox epidemic and the health authorities were expected to start taking preventive measures this week.

MEASLES EPIDEMIC

Jakarta Domestic Service in Indonesian 2300 GMT 18 Sep 77 BK

[Text] A measles epidemic has killed 28 children in Mulyosari Village, Sukorejo Subdistrict, Kendal District, central Java and 272 other children are being treated at Sukorejo hospital. Kendal District chief Abdul Saleh has ordered officials to check the spread of the epidemic through mass inoculation and by spraying of houses with insecticide. It was reported that the disease broke out last month and it has spread rapidly.

SCHISTOSOMIASIS ERADICATION

Jakarta ANTARA in English 0716 GMT 14 Sep 77 BK

[Text] Palu, Sep 14 (ANTARA)--The eradication of schistosomiasis, a disease transmitted by snails now prevalent in the Lindu highlands, Donggala (Central Sulawesi) will be carried out by agroengineering and chemical methods. It was reported here Tuesday that about 60 percent of Lindu's 1,500 villagers were affected by the ailment. The snails in swamps will be exterminated. In Napu, where 6,000 people are also suffering from schistosomiasis, the snails will be hunted and killed. University of Indonesia and foreign experts will make a study of the disease in Lindu before the end of this year. In Indonesia, schistosomiasis is only found in Lindu. The disease has been reported in Egypt, Japan and the Philippines.

JERUSALEM SYMPOSIUM DEALS WITH FIGHT AGAINST MALARIA AND SEARCH FOR VACCINE

Tel Aviv DAVAR in Hebrew 15 Aug 77 p 3

[Text] The international symposium which will take place between 15 and 18 August in Jerusalem will deal with the topic: malaria as a disease and immunization possibilities. The symposium was organized by the Center for Infectious and Tropical Diseases at the School of Medicine of the Hebrew University and "Hadassa" in Jerusalem. The initiator of the congress was the late Prof Aviva Zuckerman, who headed the center from its start in 1968, and who died a few months ago. At present, about 600 million people throughout the world suffer from malaria, which causes the death of a million people yearly. International health organizations which gave up hope of exterminating the parasites of malaria are now searching for new methods of immunizing residents of areas exposed to the danger against the disease.

Great Hopes

About 25 experts from Israel, the United States, England, Holland, Nigeria and Sri Lanka will participate in the Jerusalem congress which represents a possible turning point in the worldwide struggle against malaria. The scientists view this congress with high hopes because it is the first international meeting of experts in this domain after the revolutionary success of Dr G. B. Johnson and Dr W. Traeger from Rockefeller University. Dr G. B. Johnson and Dr W. Traeger succeeded in growing the culture of a malaria parasite in the laboratory after a period of years of strenuous efforts. Their success is of vital importance for the creation of immunization injections in the future. Dr Johnson will participate at the Jerusalem congress. This symposium is of utmost importance because in recent years malaria has become a danger which threatens more and more areas in the developing countries.

Malaria Returns

India which a few years ago was almost free of malaria now has about 2 million patients. The same is true for Sri Lanka, North Africa, the Sahara Desert and other places. The disease is transmitted through mosquitoes and for various reasons cannot be exterminated: the use of DDT is dangerous from an ecological point of view, the germs adjust to the means of extermination, and the changing governments are not capable of carrying through an extermination program in the jungles and on an international scale. WHO has announced the deterioration of the situation on special posters. A special program has been set up for fighting tropical diseases, with 50 million dollars allotted to this goal. In Israel, malaria is remembered as one of the dangerous diseases from which the first

settlers suffered at a time when malaria was an integral part of pioneer life. As a result of the visit of Judge Louis Brandeis to Israel, the medical organization "Hadassa" established in 1919 a unit for malaria research, headed by Dr Israel Kligler. The unit's activity was successful and nowadays the disease does not exist in Israel. However, the presence of Hanophilin mosquitoes has aroused apprehension about a possible new outburst of malaria in Israel. Dr Soliternik, one of the senior malaria fighters in Israel will have a malaria exhibit on display during the congress, which will show how malaria manifested itself in the country in the past.

Contribution of the Late Dr Zuckerman

The Center for Research of Infectious and Tropical Diseases was established in Jerusalem in 1968 as part of the School of Medicine of the Hebrew University and "Hadassa" as the result of the efforts of the late Prof Aviva Zuckerman and Dr Sanford Kubin from Falls Beach, Florida. Professor Zuckerman, who died in May 1977, devoted her life to malaria research. She supported the idea of developing a vaccine against malaria. The center under whose patronage research experiments are conducted and educational activities are sponsored, also promotes exchange of knowledge on the subject. It plans to create a special unit whose goal will be to develop a vaccine against malaria. A Dutch scientist, a member of the Dutch team participating at the congress, cooperates with Israel on a project of international research on malaria as a disease and on immunization possibilities. The congress will open with a worldwide survey on malaria and a lecture on memories about the elimination in the past of malaria in Israel.

ITALY

TYPHUS IN SICILY; INCREASE IN VIRAL HEPATITIS AND BRUCELLOSIS

Rome L'UNITA in Italian 21 Aug 77 p 5

[Excerpts] Caltanisetta--According to the authorities the 37 cases of typhus which have been verified during the course of a month in this Sicilian city are not an epidemic but "the resurgence of an endemic situation." This statement must appear disconcerting to the residents of a city where a water shortage is not the perennial "malady" that it is in other parts of the island. The statement is even more incredible if we consider that in the same period of time there was an increase in the number of verified cases of viral hepatitis and brucellosis. This is symptomatic of a disturbing hygienic situation. The authorities had not thought it necessary to take measures until it was pointed out to them that the drinking water supplied to the old sections of Caltanisetta was polluted with animal feces.

LAOS

ANTIMALARIA CAMPAIGNS

Vientiane BULLETIN QUOTIDIEN in French 10 Jun 77 pp 2-3

[Text] The Department of Hygiene reporting to the Ministry of Public Health sent six mobile health teams to conduct an antimalaria prophylactic campaign, and to spray DDT over the residential areas of the six districts of the Vientiane province.

During this campaign which lasted more than 3 months, these teams were successful in achieving their objectives in 136 villages of 15 communes.

Moreover, they taught the masses the rules regarding the three principles of cleanliness, and trained health fighters among the population of these areas. These officers are at present pursuing their activities.

Vientiane BULLETIN QUOTIDIEN in French 11 Jun 77 p 4

[Text] At the beginning of May, the health officers of the Luang Prabang Health Department launched an antimalaria prophylactic campaign in the rural population of the province.

Moreover, they taught preventive measures to the masses, and trained village health fighters.

The officers are at present pursuing zealously their activities in the countryside to overcome diseases.

LIBYA

BANGLADESH, EAST EUROPEAN DOCTORS, NURSES ARRIVE

Cairo MENA in Arabic 1350 GMT 29 Aug 77 NC

[Text] As-Sallum--Reports from Tripoli indicate that a large number of foreign doctors and nurses--from Bulgaria, Yugoslavia and Bangladesh--have arrived in Libya and are being dispersed among the hospitals.

Some 180 Bulgarians have arrived at the Tripoli central hospital and some 210 Yugoslavs have arrived in Az-Zawiyah. The Bangladesh doctors and nurses are being dispersed to various hospitals.

MALAYSIA

DEATHS FROM DENGUE FEVER

Kuala Lumpur NEW STRAITS TIMES in English 3 Aug 77 p 9

[Text] Kuala Lumpur, Tues.--Thirty-seven cases of dengue fever, including four deaths, were reported last month.

This brings the number of cases reported this year to 240 with 21 deaths.

The worst affected State is still Penang, followed by Selangor, the Federal Territory and Perak.

"Together, they accounted for 197 cases including 14 deaths," a Health Ministry spokesman said today.

He urged the people to continue taking precautionary measures.

"During these two months, we will again strictly enforce the Destruction of Disease Bearing Insects Act, after completing our intensive health education campaign launched last month," he said.

Kuala Lumpur Domestic Service in English 1130 GMT 28 Aug 77 BK

[Text] Four people have died of dengue fever in the Kuala Muda district of Kedah, while 16 other cases have been confirmed. The Kuala Muda district health officer said this on 28 August while watching an anti-dengue campaign launched in the district by the Sungei Petani Lions Club at Kampong Batu Dua.

POLIOMYELITIS CASES INCREASE

Kuala Lumpur NEW SUNDAY TIMES in English 18 Sep 77 p 1 BK

[Text] Kuantan, Sat. (BERNAMA)--The anti-polio campaign will be intensified throughout peninsular Malaysia immediately because the number of cases in the first seven months of this year is causing concern to the Health Ministry. Up to July, 59 suspected cases were reported, including 2 deaths in Penang and Perak. During the same period last year, only nine cases were reported. The main targets of the campaign are Perak, Kedah, Penang, Selangor and the rubber estates. The ministry's epidemiology unit stated that 95 percent of the cases were found in the 4 states--23 in Perak, 15 in Selangor, 11 in Kedah and 7 in Penang.

MALARIA ERADICATION

Kuala Lumpur International Service in English 0830 GMT 4 Sep 77 BK

[Text] The number of malaria cases in Pahang State has dropped from 8,314 in 1972 to 1,186 in the first 8 months of 1977. Only three deaths were reported during the 8-month period, compared with 29 in 1972. This is the last year of the 5-year malaria eradication campaign launched in the state in 1972.

TYPHOID OUTBREAK

Kuala Lumpur NEW STRAITS TIMES in English 18 Aug 77 p 5

[Text] Kangar, Wed.--The State Health Department began inoculating today pupils of the Sekolah Kebangsaan Padang Kota, Bintong, and people in the surrounding kampungs to check the spread of typhoid.

Its director, Dr. Ahmad Adnan, said that families of the confirmed cases or those who had close contact with the patients would be inoculated.

He told the people, especially parents of those students who had typhoid, not to worry as the situation was under control.

About 90 wells had been chlorinated.

Dr. Ahmad said that so far 46 people (45 pupils and a canteen keeper) had been admitted, and 10 of them (nine pupils and the canteen keeper) were confirmed cases.

He said that one of the nine pupils was discharged today.

Dr. Ahmad advised the people to boil water before drinking and to pay attention to their personal hygiene. He also warned them not to eat raw food.--BERNAMA.

MOZAMBIQUE

GOVERNMENT TAKES MEASURES TO CONTAIN RABIES OUTBREAK IN GAZA

Maputo NOTICIAS in Portuguese 5 Sep 77 p 1

[Text] A serious outbreak of rabies in the province of Gaza has become widespread. It has been diagnosed in domestic animals and in several human beings, especially in the interior areas of the province. Because of the epidemic proportions of such a threat, political and government

organizations in the province have begun preventive and therapeutic measures to combat the disease in various districts, in coordination with the Veterinary Services and other health jurisdictions.

According to information received on this outbreak in Gaza, rabies--a disease characterized by symptoms of excitation followed by paralysis, and which is generally fatal--is the cause of the appearance of packs of stray dogs in rural areas. Many of them, having been attacked by this virus, have bitten and transmitted the disease to domestic animals and humans.

Within the scope of concrete measures, the party's provincial headquarters sent out a circular informing about the increase of rabies cases to several districts in Gaza, giving directions to be followed for vaccinating and registering canines, as well as for the killing of all stray dogs. Stiff fines are stipulated for those who do not comply with the law. In order to implement these directives, a meeting was held the day before yesterday at the headquarters of the Limpopo District, with the officials of the dynamizing groups of Chokwe and structures of mass democratic organizations. During the meeting, the resolute orders in the circular sent out by the provincial headquarters were discussed and it was recommended that they be communicated to the peoples so the measures can be implemented.

Taking note of the large number of dogs in the province, the circular sent out to the districts stipulates that all dogs must be registered at the town hall within 30 days. It gave the town halls and other structures control over the situation, as well as proposing the killing of all stray dogs.

The circular further states that all dogs, even though authorized to remain in the possession of their owners, are forbidden to be on public streets. However, they must be taken to the Veterinary Service to be vaccinated against rabies.

The circular orders that the killing of stray dogs and of dogs which, although legally registered, are found on public streets, be taken care of by the town halls and offices in coordination with the Veterinary Service. The circular adds that the political and administrative structures must carry out a campaign for making the peoples aware, so that they will understand the necessity for the application of these measures.

VACCINATION CAMPAIGN SUCCESSFUL

Luanda JORNAL DE ANGOLA in Portuguese 8 Sep 77 p 8

[Excerpt] Maputo, 7 Sep--More than 4 million persons have already been vaccinated in the campaign that began on 14 June 1976, simultaneously in the provinces of Cabo Delgado, Tete and Niassa.

The end of this campaign will probably be 8 months in advance of the closing date set by the Ministry of Health.

Notwithstanding the great dispersion of the localities and the highway conditions, the results were considered excellent, surpassing by far all the numbers anticipated for the three provinces. Thus, the population was vaccinated as a whole against smallpox, all children between the ages of 6 and 15 years were inoculated against tuberculosis and those between 6 months and 3 years of age were vaccinated against measles.

The numbers published in the last edition of the bulletin "Health in Mozambique" reveal that in the provinces of Cabo Delgado, Tete, Niassa, Zambezia, Nampula and Sofala, about 4 million persons have already been vaccinated, taking into account the fact that the brigades just completed their work in the first three provinces.

At the start of the vaccination campaign, it was predicted that it would last until October 1979. However, since the scheduled dates were all anticipated, because of the active cooperation of the populations, it is now calculated that the campaign will be finished before January 1979. As the aforementioned bulletin emphasized, this first step was "the most difficult and the most expensive," on a long road toward the extinction of tuberculosis, measles and smallpox in Mozambique.

NEW ZEALAND

GASTROENTERITIS OUTBREAK

Wellington EVENING POST in English 3 Aug 77 p 16

[Text] The recent fatal outbreak of gastroenteritis in Hawke's Bay points to a need for parent education, the medical director of the Plunket Society (Dr David Geddis) said today.

Commenting on the outbreak in which two infants died, he said the disease was first brought under control 70 years ago after the founder of the Plunket Society (Sir Truby King) launched a programme to educate mothers on diet, hygiene and the value of breast feeding.

The illness results from a virus which causes vomiting and diarrhoea, and babies under six months are at high risk unless they are completely breast fed.

Dr Geddis said gastroenteritis was a largely preventable cause of death of children under five.

DECREASE OF INFECTIOUS DISEASES

Wellington THE EVENING POST in English 26 Aug 77 p 22

[Text] The total notification of all infectious diseases in New Zealand declined by about 1,500 during the year ended March 31, according to the annual report of the Department of Health tabled in Parliament today.

The decline in the notification of infectious hepatitis continued during the year and the number of people with gonorrhea attending venereal disease clinics fell for the first time in five years, the report said.

A VD telephone answering service had been started in Wellington and had had maximum use with large numbers of patients attending clinics as a result.

This service would be extended, the department said.

The report said that various surveys around the country continued to show an acceptable level of immunisation with triple vaccine and poliomyelitis, but there were pockets where the level was not satisfactory.

"The measles and rubella immunisation levels vary more markedly and on the whole are not satisfactory."

However, very few congenital rubella cases have been confirmed in babies since the condition was made notifiable, the report has said.

The present notification scheme had not proved effective and was under review.

PEOPLE'S REPUBLIC OF CHINA

NEW MEDICAL SCIENCE PROMOTED IN CANTON HOSPITAL

Canton Kwangtung Provincial Service in Mandarin 0500 GMT 19 Sep 77 HK

[Summary] In keeping with Chairman Mao's brilliant instruction on integrating Chinese medical knowledge with Western medical knowledge to create a new combined medical science in China, the Department of New Medical Science of the Canton Medical College Hospital has continuously eliminated the interference and sabotage of the gang of four and persisted in conducting research on preventing and treating common diseases of the respiratory tract by combining Chinese medicine with Western medicine. It has scored initial success. In the past few years, this department has carried out general examinations for chronic bronchitis on 140,000 people, 13,000 of whom have been treated. Some 2,500 of the 13,000 patients were treated

by the method of combining Chinese medicine with Western medicine. Excellent results were achieved.

The department was set up in 1971. Over the past few years, it has continuously developed its experiences in preventing, diagnosing and treating chronic bronchitis by linking Chinese medicine with Western medicine. This is the result of eliminating the interference of the gang of four and of persistently adhering to Chairman Mao's revolutionary line on public health.

"In 1974, while ostensibly criticizing Lin and Confucius, the gang of four directed the spearhead at Premier Chou. Their confederate in the Ministry of Public Health took the opportunity to make trouble. He interfered with and sabotaged research work on preventing and treating chronic bronchitis which was fostered by Chairman Mao and in which Premier Chou personally took an interest. He did not hold a national conference on prevention and treatment work. He eliminated the directive on research into preventing and treating chronic bronchitis from the state plan for scientific research. Under the influence of this cold wind, the department of new medical science was slandered and encountered many difficulties. It faced the problem of whether to continue or discontinue research work." The hospital party committee organized in a timely way the medical personnel to study Chairman Mao's and Premier Chou's relevant instructions on medical treatment and public health work. Through study and discussion, they realized: "Chronic bronchitis is a common disease and often affecting the masses of workers and peasants. It seriously harms people's health. Chairman Mao and Premier Chou attached great importance to the work of preventing and treating chronic bronchitis. We must not disappoint Chairman Mao and Premier Chou and convey the party's concern to the masses of workers and peasants."

Despite the gang of four's pressure, the department of new medical science has continuously developed over the past few years. The department now has 7 doctors and 16 nurses. It has built new wards and has received new equipment. It has broadened the scope of its research from chronic bronchitis to lung and heart diseases, asthma, pneumonia, pleurisy and lung cancer. It has conducted many experiments and translated a large number of ancient, modern, Chinese and foreign reference books.

KWANGTUNG MEDICAL ACHIEVEMENTS

Canton Kwangtung Provincial Service in Mandarin 0500 GMT 26 Sep 77 HK

[Summary] Kwangtung's public health front has set up 24 hospitals for combining Chinese and Western medical treatment throughout the province and scored outstanding achievements. These hospitals can practice both Chinese and Western medical treatment methods. The Kwangtung Public Health Bureau has run study courses while Canton and other public health

departments in various areas have opened exhibitions on achievements of combining Chinese and Western medical treatment. A large number of units have also summed up experiences in combining Chinese and Western medical treatment.

PERU

MALARIA CASES REPORTED

Lima LA CRONICA in Spanish 12 Jul 77 p 8

[Text] Piura, 8 Jul--Malaria in the northwest health sector is occurring at a rate almost double the incidence for last year, according to statistics released officially which single out Sullana and San Lorenzo as the places which have become principal disease centers. The data were released during a talk before the Piura Development Committee by Dr Manuel Campos Sanchez, northwest regional health director, who has his office in Piura.

During the first 5 months of the year the figures considered as tolerable limits were exceeded alarmingly, and health authorities were obliged to take emergency measures to avoid quickly a spread of the disease, which had been totally eradicated in Peru a few years ago. Comparing this year with last year shows an increase of 118 percent. Figures for the first 6 months of the year are: 5,905 cases of malaria in the region, with 50 percent in the Piura department. As for ages of the persons affected, they vary between 24 and 44, that is, the economically active period, which shows clearly the serious effects especially regarding production, since this disease generally attacks persons working to make the earth produce, because they are in close contact with areas where mosquitoes live.

This is corroborated when it is noted that the farmworker of the Chira and San Lorenzo valleys is most affected by indigenous malaria; this could interfere with agricultural development.

In accord with statements of Dr Manuel Campos Sanchez, the regional health office is ready to take emergency measures in order to reduce the spread of malaria and lower the rate of incidence. This will be an intensive project and will be under the Hospital Area officials of the agency.

Lima LA PRENSA in Spanish 28 Jul 77 p 17

[Article by Elmer Nunez]

[Text] Piura, 27 Jul (LA PRENSA)--An infestation of mosquitoes here has become a matter of concern, as well as a threat to the inhabitants of the

city, because it has been found that the anopheles species has reappeared in this area and is causing scores of malaria cases.

Mosquitoes are extremely thick in residential areas like Santa Isabel and Miraflores, but they are overwhelming in outlying areas such as El Indio-San Bernardo and the newer western sectors.

Asked about this problem, the prefect admitted that "they are also pestering me in Santa Isabel," and he said that since the recent rainy season he had proposed a coordinated action by health agencies to counteract the plague of mosquitoes "even before we discovered that malaria was on the rise here."

The consensus is unanimous: Everyone is demanding that the mosquitoes be fought with whatever means are available, particularly in view of a possible massive infestation.

Spokesmen for the Ministry of Health indicated in addition that there is coordination of action with international agencies to renew the anti-malaria campaign which in the fifties produced excellent results in the northeastern region, when the special antimalaria service was under the direction of the German-born Peruvian citizen, Dr Alfredo Heinzelmann. Since that time malaria not only has disappeared from this region, but the rare cases discovered have been nothing less than exotic curiosities.

REPUBLIC OF SOUTH AFRICA

CRIPPLING DISEASE HITS 2,000 IN ZULULAND

Johannesburg THE STAR in English 9 Sep 77 p 7

[Text] Durban--More than 2,000 people in the remote Mseleni district of Zululand are suffering from a crippling disease which is baffling doctors and scientists throughout the country.

Professor G. du Toit, of Johannesburg, who has carried out intensive studies in the area, told delegates at the annual congress of the SA Orthopaedic Association yesterday that despite detailed research, no positive conclusions had been reached.

He said 85 percent of the older people were crippled. The first signs usually appeared around the age of 30. Between 30 and 40 they could only walk with sticks.

From 40 onwards, their only means of motion was crawling. In all cases, the hip was affected.

"The disease is causing socio-economic devastation, with most people unable to work and living on permanent disability grants," he said.

From recent studies, it is shown that the disease affected 40 percent of women and only 10 percent of men. In a family of 44 members, 25 were affected.

Possible Clue

The only possible clue to this disparity was that girls in the area were not allowed certain foods after the age of 13. These included high protein substances, such as eggs, chicken and meat.

"But this doesn't prove very much," said Professor du Toit.

"In an area, not more than 20 km away, which is subject to the same tribal conditions, there is rarely a case of this disease."

In an effort to find a solution, medical teams have compared the affected area with a nearby disease-free area, analysing diets, vegetation, ground samples, water and tribal customs, but to date there have been very few differences.

'NEW' GERM RESISTANT TO ANTIBIOTICS REPORTED

Johannesburg THE STAR in English 19 Aug 77 p 2

[Text] Three patients at the Consolidated Main Reef Hospital, West Rand, have been found to be suffering from an infection caused by pneumonococci bacteria resistant to certain antibiotics.

Professor H. J. Koornhof, head of the Department of Microbiology at the South African Institute for Medical Research in Johannesburg, who has been investigating the infection, said today there was no need for the public to be concerned about the new resistant strain.

"There are antibiotics to which it is still susceptible and the patients can therefore be treated successfully," he said.

Until now the best treatment has been with penicillin and chloramphenicol. Strains resistant to either of these antibiotics have been found elsewhere in the world. In June a strain resistant to both was found in Durban.

The Johannesburg strain, in addition, is resistant to several other antibiotics.

Johannesburg THE STAR in English 5 Sep 77 p 1

[Text] An American specialist in disease control has flown to South Africa to investigate a mystery germ that may have claimed the lives of four children.

The mission is part of a determined effort to eradicate the germ--at present restricted to South Africa--before it spreads to other parts of the world.

A spokesman for the United States Disease Control Centre in Atlanta said if the antibiotic-resistant bacteria became widespread it could present a major world health problem.

Meningitis

Dr H. J. Koornhof, head of the Department of Microbiology at the South African Institute for Medical Research, said today the bacteria appeared to be confined to hospital patients.

He said it could be carried by people who were not infected.

"The germ is confined to a few hospitals and there is no cause for alarm at this stage," he added.

The germs belong to the general strain of bacteria called pneumococci, the most common cause of bacterial pneumonia in the world, and were first isolated in Durban where there were three fatal cases of pneumococcal among infants.

Later, germs even more resistant to antibiotics were found in Johannesburg. One hospital reported 80 patients infected, with one death.

Some hospital staff members and patients were found to harbour the germs without showing obvious signs of infection.

THE STAR's New York Bureau reports the CDC is the main agency in the US dealing with infectious disease outbreaks. Officials attached to the centre say there is no way of predicting whether, or how fast, the resistant strains of pneumococci might spread elsewhere.

The bacteria found in South Africa are so solidly resistant to penicillin, according to the CDC, that most patients could simply not be given enough of the drug to kill the germs.

SCIENTISTS SEEK CARRIERS OF MULTIRESISTANT GERM

Johannesburg THE STAR in English 20 Sep 77 p 5

[Text] Strenuous efforts are being made by the South African Institute for Medical Research to trace all carriers of the newly discovered multi-resistant germ in its "operation eradication."

The organism is a pneumococcus which may cause pneumonia and other serious infections.

It has been found in several hospitals on the Reef.

Professor H. J. Koornhof, head of the Microbiology Department, who is leading the work, says preliminary studies have shown that the pneumococcus does not seem to spread readily in the community but confines itself largely to hospitals.

"This is very reassuring," he said.

He is being helped in his massive task by Dr Joel Ward, of the Centre for Disease Control, Atlanta, Georgia, USA.

Although resistant to several antibiotics, there are drugs left to which the organism is sensitive.

"We have to look for patients who have left hospital but are still carrying the organism, and then treat them," Professor Koornhof said.

"Fortunately there have been no new deaths in Johannesburg and no very serious infections that can be attributed to the organism."

RHODESIA

MEASLES RESPONSIBLE FOR INCREASED DEATHS

Salisbury THE RHODESIA HERALD in English 16 Sep 77 p 11

[Text] Measles has increased in Salisbury this year, according to the City Health Department which said yesterday 177 deaths due to measles had been registered in the city so far this year.

Of these, 59 had died in the city's infectious diseases hospital. The department said 250 people could die in Salisbury from measles by the end of the year if the rate continued.

A major problem was the influx of people into the city for medical treatment. Unvaccinated children coming into Salisbury were likely to catch

measles because the disease was highly infectious and they were entering a crowded environment.

Most of the children who died were unvaccinated and malnourished. Very few of the children vaccinated in the city caught measles.

The city was going all out to get people vaccinated. Mobile clinics were touring the townships using loudspeakers.

SAUDI ARABIA

HEALTH FACILITIES EXPANDED

Riyadh AL-RIYADH in Arabic 16 Aug 77 p 2

[Text] Measures will be taken to improve the qualifications of workers in health centers and to expand recruitment and training programs. Dr Husayn Jaza'iri, minister of health, issued a directive to commence accepting applications of qualified medical personnel to supply the needs of the ministry with priority in employment given to local applicants. It was decided to provide every bilharzia (schistosomiasis) and malaria fighting center as well as the division of water and environment all their needs for personnel and medical equipment. A central administration will be established to oversee the work of health laboratories and two branch laboratories, one each for the northern and southern districts, will be opened. This information was given to AL-RIYADH by a Health Ministry spokesman who informed us further that additional medical staffing will be made to all health programs administered by present social development centers. The number of programs and staffing will be increased as soon as the Ministry of Labor and Social Affairs opens additional new centers. The additions will be according to the needs of each center. The spokesman added that the health minister will review with concerned officials and department heads the need to improve the qualifications of personnel employed by existing health centers, and to upgrade training and working conditions. Sufficient funds will be budgeted to give the bilharzia and malaria units as well as the water and environment department their requirements for personnel and modern medical equipment. Among the ministry's projects are the establishment of an administrative center for health laboratories and the creation of two additional branch laboratories. Implementation of these projects will take place soon according to the spokesman. One of these laboratories will serve the northern district, the second the southern district. These are in addition to the 11 laboratories currently in existence throughout the country.

SRI LANKA

MALARIA CASES

Colombo SUN in English 11 Aug 77 p 3 BK

[Text] A total of 304,487 positive cases of malaria were detected during 1976 according to a report issued by the Health Department. Most of these cases were from Hambantota District. Malaria is spreading in Suriwewa, Tanamalwila, Kolambagere, Walasmulla, Kataragama, Tissamaharama and Angunakolapelessa the report says. Many cases of malaria and filaria have been detected in Negombo also.

SUDAN

AL-JAZIRAH PROVINCE, A BREEDING GROUND FOR MALARIA

Khartoum AL-SAHAFAH in Arabic 1 Aug 77 p 5

[Article by Abu Fa'iz]

[Text] The subjects of malaria--or the scourge of the people of al-Jazirah, as they say--and the preparation of a campaign to eradicate it formed the basis of a conversation held by AL-SAHAFAH with Dr Mansur Muhammad Mansur, assistant to the governor for health affairs and director of the department in charge of combating malaria in the province. Following are the results of that conversation.

Results of the Examination

With regard to the results of the examination of the citizens which is being conducted to determine if they have malaria, Dr Mansur said that Giemsa stain is being used to detect malaria, particularly in the campaign being waged to eradicate this lethal infectious disease. This stain gives results which are 100 percent accurate. Close behind it is the (Field A-B) stain, which is not used because of lack of availability. The A part of this stain is not effective and the results of the examination always come out wrong. Therefore these stains must be provided in order to arrive at accurate results.

The Insecticide and Eradication of the Microbe

The insecticide used in dealing with this problem is malathion, which has a residual effect. Its function is to kill the adult flying mosquitoes, both male and female. It is possible to eliminate the malarial parasite from a person's blood after complete and proper treatment. With regard to

the reappearance of malaria in a patient, such a recurrence of the infection usually occurs in cases of incomplete and improper treatment.

Material Loss From Malaria

Because of its nature, this disease affects the economic situation of both the individual and the state. If the citizen of al-Jazirah is repeatedly exposed to malaria in the presence of other diseases, he can contract it, and this affects his production. It became evident from the statistics that 33 workdays were being lost per productive individual in the province of al-Jazirah because of malaria. By performing a simple calculation, we can arrive at the amount of production lost in the farmers' sector, by way of example. In al-Jazirah there are some 100,000 farmers, and from this figure it is clear that the loss from malaria is as high as 330,000 lost workdays. This, along with the cost of treatment, certainly has an impact on the economy of the Sudan.

Costs of Eliminating the Malarial Parasite

The annual cost of combating malaria in al-Jazirah is over a million pounds. Aside from the Ministry of Health, these costs are shared by the province of al-Jazirah, the province's administration and the al-Jazirah project.

The insecticide malathion is used in the campaign and costs 200,000 pounds per year. The benefits which accrue from the use of this insecticide are certainly very great, from both the financial and health standpoints.

Start of the Campaign

The campaign to combat malaria in al-Jazirah began in June 1975 with all citizens of the province compelled to take therapeutic doses of medicine. At that time, the rate of occurrence of malaria was 33 percent, but it has been possible to reduce this to 3 percent, or by a factor of 10.

The campaign will provide its services to 1.3 million citizens in the province and will protect them from this disease by spraying their houses twice a year and by examining suspect cases in the facilities of the centers which were established when the campaign began.

TANZANIA

RABIES IN SHINYANGA REGION

Dar es Salaam UHURU in Swahili 22 Aug 77 p 4

[Text] Up to July this year, 1,208 people in Shinyanga Region were bitten by dogs or other animals considered to be rabid. Of these 21 died. The

health officer of Shinyanga Region, M. Maungu, said the day before yesterday that since this disease occurred in the region in late September last year, 21,177 dogs and 336 rats have been shot to death. Another 3,846 dogs were inoculated against rabies. Officer Maungu said that during June and July, 214 people were bitten in Shinyanga, Maswa and Bariadi districts by dogs considered to be rabid. Maungu added that there is no further incidence of the disease in Kahama District because there are no reports at all of any person having been bitten by dogs or other animals considered to be rabid during June and July this year. During the anti-rabies campaign, 150,000 shillings were spent for purchasing bullets and transporting groups to administer inoculations and to kill dogs and rats.

SHINYANGA REGION MEASLES OUTBREAK

Dar es Salaam UHURU in Swahili 29 Aug 77 p 4

[Text] A total of 38 children died from measles in Shinyanga Region between May and June this year, the health officer in Shinyanga Region, Michael Maungu, announced the day before yesterday. Officer Maungu said that during this period a total of 1,484 [sic] children suffered from this disease. He stated that 13,832 children have already been inoculated against measles. Kahama District has been most affected by this disease. A total of 700 children suffered from measles, 18 of them died, and 2,627 children were vaccinated. In Maswa District 407 children suffered from the disease, 9 of them died, and another 3,418 children were given measles inoculations. In Shinyanga District 307 children suffered from the disease, 11 of them died and 4,085 children were inoculated. In Bariadi District 3,702 children were inoculated but no report has been issued concerning the number who died from or fell ill from this disease. Measles reportedly occurs every year during the kiangazi [clearing up of the weather after rain]. Officer Maungu asked all the inhabitants to send their children quickly to hospitals, dispensaries or health centers when they experience the first fever of measles. He said that the deaths of children from measles in this region have resulted from delays in sending them to hospitals when they were stricken with the disease.

REGIONAL OFFICIAL PRAISES CUBAN MEDICAL PERSONNEL

Dar es Salaam in English to East Africa 1000 GMT 17 Sep 77 LD/EA

[Text] Tanga--The Tanga regional party secretary, Ndugu (Kingunge Ngumbali Muiru), has praised the Cuban medical personnel working in Tanzania for their commitment to work for the betterment of humanity. The regional party secretary was speaking to a group of 18 departing Cuban doctors and nurses who have completed a 1-year tour of service at (Bombo) hospital.

At a reception to bid them farewell and to welcome a new group of 15 other Cuban doctors and nurses at the hospital, Ndugu (Ngumbali Muiru) hailed

the assistance of Cuba to Tanzania, particularly in the medical and education fields. He called upon Tanzanian medical staff to learn from the Cuban counterparts that it was impossible to separate medical practice from ideology. On liberation, the party secretary paid tribute to Cuban people, under the leadership of their Communist Party and President Fidel Castro, for their contribution to the struggle for the liberation of Africa and oppressed people all over the world.

TURKEY

HEPATITIS SAID SPREADING IN ANKARA

Istanbul BARIS in Turkish 20 May 77 p 5

[Text] Recently rumors to the effect that the hepatitis epidemic in Ankara had taken a dangerous turn began to spread.

The authorities at the Ministry of Health stated that the epidemic is not as dangerous as is being said. On the contrary, compared to last year, it has decreased by two-thirds.

Ertugrul Aker, director general for health affairs in the Ministry of Health, pointed out that the disease is transmitted through urine, human excrement, expectoration, liquid foods and through blood transfusions, and that young people and children are especially susceptible to it. He added that "The disease is being observed more frequently in the autumn and winter months and among people living in crowded conditions."

Ertugrul Aker explained that, if this disease is not diagnosed early, it can become dangerous and the proper medicine remedy and vaccine have not yet been found for this virus, and he gave this information concerning this problem:

"Hepatitis epidemics occur constantly in Turkey and the whole world. Although there is no special drug or vaccine for this disease, and no way of combating it, studies indicate the disease has been decreasing with every passing year. In its pattern this year, compared to that of last year, the incidence of hepatitis encountered was proportionately less by two-thirds. Infectious hepatitis is especially observed in places with poor environmental conditions where people live in crowded places. We may say that in large cities, its occurrence is greater as compared to that in small cities."

Director General for Health Affairs of the Ministry of Health Ertugrul Aker indicated that, in order to warn the people against infectious hepatitis, a variety of meetings in which universities also participated, symposia and conferences have been organized. He listed the precautions to be taken for protection against the disease as follows:

"Disease propagates through urine, human excrement, expectoration, liquid foods and through blood circulatory pathways. Therefore, the people should take suitable measures in the matter of sanitary rules of disposal of human urine and excrement. The sick suspected of disease should be removed to a hospital without delay and treated. In blood transfusions, the substance known as the 'Australian Antigen' must definitely be sought. People should pay great attention to avoid eating foodstuffs contaminated with human wastes. One should use chlorinated water, and pay extreme attention to sanitary rules necessary under crowded living conditions."

RABIES VICTIMS

Istanbul CUMHURIYET in Turkish 25 Aug 77 pp 1, 9

[Text] Izmir (CUMHURIYET Aegean Bureau)--The death in spite of treatment of two persons who were bitten by a rabid dog has aroused fear and panic in Kusadasi, it was reported.

According to information obtained, Huseyin Moral, a service station attendant, was bitten by a rabid dog, contracted the disease, and died shortly after receiving treatment. Ibrahim Soydan, who is known to have been bitten by the same dog, also contracted the disease and died. It was reported that Ibrahim Soydan had begun receiving treatment after being bitten by the dog.

The deaths resulting from bites by a rabid dog have instilled fear in the residents of Haci Feyzullah, where Huseyin Moral lived, and in the area where Ibrahim Soydan lived.

The fact that two persons who were receiving treatment should contract the disease and die prompted accusations that the medication used was stale and had no effect, although this was denied by the health center. Authorities have asserted that there could be no question of the medication being stale, but they have been unable to explain why the two people died although receiving treatment.

Sazlikoy Under Quarantine

Elsewhere, our Aydin correspondent has reported that Sazlikoy, the capital of Soke, is under quarantine after a child was bitten by a donkey which was found to have rabies and that efforts to combat rabies have begun.

According to information obtained from the office of the Soke government doctor, when 9-year-old Durmus Yilmaz was bitten by a stray donkey that was found to have rabies, it was decided to take preventive measures in the capital of Sazlikoy. Citizens of the district are being notified by various means to confine their dogs and that stray dogs will be destroyed in an effort to prevent a rabies epidemic.

Istanbul POLITIKA in Turkish 26 Aug 77 p 4

[Excerpts] Aydin (Turkish News Agency)--Two men from Kusada district, Aydin province, have died from rabies even though they were given the regular injections. Both men were bitten some time earlier by a rabid dog and were later given treatments at the health center in Kusada. An investigation by Health Ministry officials following the deaths of these two men revealed that they had been given inoculations of outdated medicine, and this is stated to be the cause of their deaths.

Istanbul POLITIKA in Turkish 11 Sep 77 p 2

[Excerpts] Eskisehir (THA)--A rabid dog in the provincial capital of Eskisehir bit Gokhan Unal, 8, four other unidentified persons, and a horse. Gokhan is being treated for rabies, and officials are urging the other persons to come to the state hospital for treatment.

TYPHOID OUTBREAK REPORTED

Istanbul MILLIYET in Turkish 17 Aug 77 p 10

[Text] At least one young girl has died from typhoid in Istanbul's Kocasinan district. Despite this fact, it has been impossible to prevent the people in the area from drinking the contaminated water which is the cause of the typhoid outbreak. Istanbul Province Health Directorate authorities reported that the outbreak was caused by sewage mixing with drinking water and they gave the following information: "Thirteen people who have contracted typhoid from the water which has been contaminated by sewage in Kocasinan have been taken to Bakirkoy's Tropical Diseases Hospital. One of these patients, 15-year-old Fatma Dumlupinar, has died. The conditions of the other 12 patients are reported as improving. An intensive vaccination campaign has been carried out to halt the spread of the disease."

After the outbreak of typhoid in Kocasinan, water samples which were taken from the Soganli area by the Bakirkoy Government Medical Office were sent to the Istanbul Veterinary Directorate Senlikkoy Laboratory for examination. In a 1 centimeter cup of water from these samples which were drawn from a well, three fountains and one water system, a 40 E Coli bacteria increase was noted.

Kocasinan Municipality authorities had this to say about the situation: "The population of Kocasinan is 60,000. We give our people 25 liters of water at a time. This is not sufficient and people are now opening wells that are not deep enough. We put a guard in front of the Beykoz fountain. The people take water from this fountain saying: 'I am not going to drink this water. I am going to use it to wash my dishes.' But how can we know

what they do with it at home? The Kocasinan Municipality is following the situation closely and is awaiting assistance."

Istanbul CUMHURIYET in Turkish 28 Aug 77 pp 1, 9

[Text] Istanbul News Service--A statement yesterday on behalf of the Turkish Physicians Union concerning recent occurrences of contagious diseases said that there is no disease by the name of acute intestinal infection, but that the term refers to typhoid, paratyphoid, cholera, dysentery, and certain other bacterial ailments of the digestive system.

Speaking on behalf of the Central Council, Vice President Esat Eskazan said that 92 cases of typhoid were reported to the health director from 1-24 August, whereas the total number of cases for the first 7 months of 1977 was 40, and the total for the entire year of 1976 was 73. He said that both for August 1976 and up to 3 August 1975 the number of typhoid cases had been 7 and that typhoid, which is seen infrequently in Istanbul, was now on the verge of an epidemic. The statement also said that there were over 100 patients in certain hospitals whose symptoms resemble typhoid from the clinical standpoint and who were being treated along those lines, but could not be diagnosed precisely until the laboratory studies were complete.

The statement referred to an earlier release by the Central Council on 11 August calling attention to the gradual spread of the epidemic and continued as follows:

"It must be stressed that failing to find causes on the disease charts and to report them as though known is an attitude that promotes the spread of disease and makes treatment more difficult.

"Diseases affecting the digestive system which are killers if the necessary precautions are not taken can be distinguished by specific clinical indications and laboratory tests. Insisting on the term acute intestinal infection only serves to give the impression of a lack of information or an attempt to hide known facts. Claiming ignorance of occurrences leads to the spread of intestinal infection and increased fatalities, not to mention the belittlement of Turkish medicine.

"Because of these epidemics, the importance of protective health services and environmental conditions affecting health becomes concrete. Such contagious diseases are usually encountered among laborers and workers who live in areas where economic resources are limited and environmental health conditions deplorable.

"Moreover, there is one medical expert, who is also the head doctor, at the 100-bed Tropical Diseases Hospital in Istanbul which was founded to combat intestinal diseases, who works at great personal effort and with

very few personnel to diagnose and treat the 85 patients now in the hospital. One microbiologist was appointed just a day ago. This situation shows how prepared the ministry is for outbreaks and how important it considers them."

Istanbul AKSAM in Turkish 19 Sep 77 p 5

[Excerpts] Erzurum (THA)--Following a recent outbreak of typhoid in Kaledibi village, Tortum district, Erzurum province, a total of five persons have been taken to the contagious diseases clinic of the Erzurum Model Hospital, and the village has been placed under quarantine.

INTESTINAL INFECTION OUTBREAK

Istanbul AKSAM in Turkish 6 Sep 77 p 5

[Excerpts] Konya (THA)--An outbreak of intestinal infection has reached dangerous proportions in Karaman district, Konya province, causing the deaths of five persons. According to information obtained by a THA reporter, extensive measures have been taken to curb this disease, which is caused by contaminated water, and the eating of fruit and vegetables which have not been washed. This disease begins with a moderate fever, sluggishness, and diarrhea.

Istanbul MILLIYET in Turkish 12 Sep 77 p 1

[Text] It has been announced that three people have died from an acute intestinal infection in Denizli. Denizli Deputy Governor Suavi Erdemtok said, "The truth of the matter is that 3 people have died from an infectious disease, and 21 others are undergoing treatment at the Denizli State Hospital. Health teams are conducting an investigation in the villages. The amount of chlorine in drinking water will be increased, and studies will be conducted concerning the closing of open irrigation ditches and cesspools."

MALARIA OUTBREAK

Istanbul POLITIKA in Turkish 3 Aug 77 p 5

[Excerpts] Viransehir (THA)--The Viransehir Malaria Eradication Branch in Urfa Province has reported an outbreak of this disease in this region, involving 21 individuals. It is reported that those who have contracted malaria are agricultural workers returning from Cukurova. Swampy areas in the villages of Yuem, Kocar, Telhamut, Zenginova, Curcup, Arada, Harbetteys, Aysok, and Zilfikar are responsible for the increase in

mosquitoes and the danger of malaria. The people of Ceylanpinar district and Viransehir have appealed to the Health Ministry to curb the spread of this disease.

Istanbul CUMHURIYET in Turkish 24 Aug 77 pp 1, 9

[Excerpts] Malaria is spreading rapidly in Adana, with more than 4,000 persons coming down with it every week. According to Health Director Dr Nevzat Arman, the number of malaria cases which was 49,000 a week ago has risen to 53,000 today. In the past 3 days in Tarsus, 50,000 persons have been tested for malaria, with 7,372 cases confirmed. It was reported that WHO is involved in combating malaria in Tarsus and that an expert from the organization is conducting inspections in the region.

Istanbul HURRIYET in Turkish 1 Sep 77 p 3 NC

[Text] According to information given by the director general of the Antimalaria Department, Dr Berdan Akalin, the number of malaria cases in Turkey rose to 90,188 during 1976. Dr Akalin said that the highest number of malaria cases in 1976 were recorded in the Cukurova Region and that the workers arriving from other provinces are becoming malaria carriers.

INCIDENCE OF TRACHOMA

Istanbul AKSAM in Turkish 8 Sep 77 pp 1, 7

[Text] It has been announced by the Diyarbakir branch of the Comprehensive Health, Personnel Unity and Solidarity Association (Tus-Der) that a total of 29,154 persons in the regions of Mardin, Siirt, Bitlis and Diyarbakir have been found to suffer from trachoma, and that only one medical specialist has been appointed in the area. According to the Tus-Der announcement, trachoma occurs more frequently in arid regions. In the statement which alleged that no specialist is to be found in the provinces outside Diyarbakir, it was announced that 35 health officials are fighting trachoma in the provinces of Siirt, Mardin, and Bitlis. The examination and medical treatment required are not within the purview of a health official's duty. In the announcement it was noted that 19 persons stricken with trachoma in Diyarbakir have become blind. In order to conduct the struggle against the illness in backward regions in Diyarbakir, Siirt, Mardin and Bitlis, it was remarked that unless specialists are provided, no positive results will be attained in these areas. According to the Tus-Der announcement, last year alone saw 12,494 cases of trachoma registered in Diyarbakir, 10,572 cases in Mardin, 3,628 cases in Bitlis, and 2,460 cases in Siirt.

NEW MEDICINE TO COMBAT BILHARZIOSIS

Kampala VOICE OF UGANDA in English 9 Aug 77 p 3

[Excerpt] Two manufacturers of pharmaceuticals in the Federal Republic of Germany have developed a new kind of medicine to combat bilharziosis (schistosomiasis). Compared with the level hitherto reached, this medicine offers improved possibilities for treating the patient.

The decisive factor in this new medicament is an active substance which has been given the name "Praziquantel." This agent was synthesized for the first time by the firm of E. Merck in Darmstadt. Research groups at Bayer AG (Leverkusen) then discovered and proved experimentally the antiparasitic efficacy of "Praziquantel."

The development of the active substance to an applicable medicine is the result of years of cooperation between the two companies. On the basis of the clinical knowledge gained to date in tropical areas of Africa, South America and South East Asia, Merck and Bayer expect that a single dosage per patient will suffice in medical practice. There is no danger of any side-effects.

VENEREAL DISEASE DECREE EMPHASIZES TREATMENT

Kampala VOICE OF UGANDA in English 19 Sep 77 pp 1, 3

[Excerpts] Life President Idi Amin has signed the Venereal Disease Decree whose main emphasis is on treatment of the disease other than punishment. The Decree was signed on Saturday and its main contents are as follows:

A medical officer of health or a chief not below the rank of a sub-county chief may direct any person whom he reasonably suspects to have venereal disease to be medically examined in order to find out whether that person has the disease.

It will be an offence for a person to refuse to obey that order concerning medical examination.

It will also be an offence:

For a person to unlawfully or negligently do any act which is and which he knows or has reason to believe to be likely to spread the infection of venereal disease;

For a person, while suffering from a venereal disease, other than a disease certified by the medical officer of health to be incurable, to knowingly harbour such disease;

For a person while detained at a place of treatment, to leave such a place without a letter of discharge from the medical officer;

For a person to wilfully contaminate any other person with aforesaid disease;

And any person who has the disease must name his or her contact, so that the contact, may also be treated.

A person convicted of an offence under this part of the law is liable to a fine not exceeding 2,000/- or to a term of imprisonment not exceeding six months, or to both.

The court may also require such a person to meet the expenses incurred in the treatment of himself or any person he has contaminated. It is therefore clear that the emphasis is on treatment and not imprisonment. Any chief or any other authorised officer or any person whatsoever who abuses the terms of this law, for instance, who uses it not in the interests of the law but just to avenge a grudge, may if convicted, be sentenced to a term of imprisonment or to a fine or to both.

The Marshal has directed the acting minister of justice to make the law on venereal diseases available in bookshops in Uganda next week. He is also to have it translated in several vernacular languages.

URUGUAY

MASS IMMUNIZATION AGAINST TYPHOID TO BEGIN IN RIO BRANCO

Montevideo LA MANANA in Spanish 16 Aug 77 p 7

[Excerpt] Plans have been made to begin vaccinating the population of Rio Branco for typhoid today. A total of 1,000 doses of vaccine have been received. The first persons to receive the inoculations will be evacuees and on Thursday, the program will begin in the schools still operating in flooded areas. Vaccination is obligatory for residents of the lower zones because that is where the sewers overflowed. It is optional for the rest of the population. Children and adults will receive shots, with the minimum age being 6 months. For the time being, Public Health authorities have indicated that there are no health problems and the inoculation is preventive in nature.

MEASLES VACCINATION CAMPAIGN BEGINS THROUGHOUT COUNTRY

Montevideo EL PAIS in Spanish 18 Aug 77 p 5

[Text] The measles vaccination campaign has begun throughout the country. A total of 250 vaccination stations have been set up. All mutual benefit societies are providing free inoculations. Some 3,500 children received their shots in Montevideo yesterday. By 24 August, the date marking the end of this genuine antimeasles campaign, all children between the ages of 9 months and 4 years--120,000 in all--are to be vaccinated. Only 10 percent of that number have received inoculations so far. Dr Marta Burgos from the Ministry of Public Health told EL PAIS that persons with the disease can pass it on to children who are not vaccinated and who then contract the serious illness.

"All children in the country between the ages of 9 months and 4 years should be vaccinated for measles as soon as possible," EL PAIS was told late last night by Dr Marta Burgos, head of the Contagious Disease Section of the Ministry of Public Health.

"In recent years, it has become possible to control measles by means of vaccinations. It is the disease responsible for the greatest number of deaths in Uruguay," said the Ministry of Public Health official, who added that in 1974, it caused 147 deaths and multiple complications in many of the children who managed to recover, because "this illness has aftereffects such as mental retardation varying in severity, partial deafness, personality disorders and other symptoms detectable through electroencephalograms."

Only 10 Percent Vaccinated

Some 120,000 children are to be vaccinated during the next 9 days in order to halt a budding epidemic that must be stopped peremptorily, Dr Burgos said. According to the official, only 10 percent of all children susceptible to the disease have been immunized against the dangerous illness. "The inoculation is harmless, does not cause any allergic reactions and stimulates the organic defenses of children against the pathogenic agent which is responsible for the disease which varies in intensity," she said. "At 12 months of age, protection is 98 percent effective, and at 2 years, it is virtually total. On the other hand, if the child is 6 months old, the degree of immunity is scarcely 60 percent. That is the reason why it is advisable to repeat the inoculation when the child is 1 year old."

Those Who Cannot be Vaccinated

When asked about precautionary measures to be adopted with respect to possible ill effects of the vaccination, Dr Burgos said that inoculation is not recommended for children "suffering from acute fever, those on corticosteroid drugs, anyone with malignancies, persons allergic to eggs,

those suffering from severe cases of active tuberculosis or serious respiratory diseases, and finally, persons having received gamma globulin." In the latter case, she explained, the inoculation should not be given before at least 1 month has passed.

Vaccination Stations

"The Ministry of Public Health has made every possible effort to see that this operation is successful and for the first time in history, we have had a universal response, meaning that at mutual benefit societies, medical services of government agencies and hospitals, there are vaccination stations throughout Montevideo," Dr Burgos said. She added that at health centers and subcenters in every department in the interior and at the outpatient clinics throughout the country, special inoculation services have been set up. Approximately 250 places will be open until 24 August to vaccinate all children absolutely free of charge.

Campaign Underway

Yesterday, some 3,500 children were vaccinated in Montevideo. Final figures will be available today, but the anticipated number of persons went to the stations, Dr Burgos said. "Precise information is not yet available for the interior. We hope that just as was the case in previous campaigns of this nature, the population will increase its participation and that by the end of the week, even more will go for their shots." Finally, she emphasized the great importance of this veritable crusade against measles, "the only effective way of halting a budding epidemic in the country."

NEW RESOLUTION SETS SANITARY STANDARDS FOR SALE OF BREAD

Montevideo EL DIA in Spanish 20 Aug 77 p 1

[Text] Other than in the bakeries, it will be possible to sell bread only in places especially adapted for such a purpose whose facilities and personnel comply with certain hygienic requirements.

According to a municipal resolution adopted a few hours ago, full compliance with existing bromatological standards will be demanded. The text expressly forbids the sale of the product in stores, markets and other establishments unless they are furnished for such a purpose with sealed showcases to prevent all contamination, and with personnel solely assigned to that task.

Official sources stated that the measure ratifies existing regulations and incorporates others for the purpose of improving health conditions. The decision also includes norms regarding the transportation of bread, which must be done in especially adapted vehicles meeting certain requirements.

The spokesmen indicated that the resolution has gone into effect, but the announcement and publication of the same will take place within a few days. They pointed out that rigorous inspections will begin once this requisite is met. Transgressors will be severely penalized.

The measure will affect many retail merchants, particularly those located in the various sections of Montevideo. Supermarkets will have to modify their sales system.

STRICT SANITARY CONTROL BEGUN IN BARS, CAFES

Montevideo LA MANANA in Spanish 24 Aug 77 p 5

[Text] The municipality is imposing strict controls on bars and cafes. The controls in question are enforced by the General Inspection Service with a view to the approaching summer tourist season.

The ordinance which regulated the activity sets down a number of obligatory rules for those establishments intended to protect the wholesomeness of the foods expended in them and the health of the customers. It stresses the responsibility of all personnel to have valid health certificates, and the ban against the direct handling of food which applies to cashiers and other personnel dealing with money.

The municipal inspectors are rigorously enforcing these measures, basic to the health of the population, as well as other no less important ones.

The normative text establishes, for instance, strict conditions of hygiene and cleanliness for the establishments and, in particular, to be observed with regard to their restrooms. It also establishes the conditions applicable to the sinks for washing the dishes, and the manner in which the various utensils and implements must be cleaned.

Fines imposed on businesses which fail to comply range from 25 to 1,000 new pesos, and all items which are noxious to health will be confiscated.

NO CASES OF TUBERCULOSIS DISCOVERED

Montevideo LA MANANA in Spanish 30 Aug 77 p 8

[Summary] The programs carried out by the Honorary Commission to Combat Tuberculosis in the 1974-76 period verified that there were no cases of infant tuberculosis in the poor sections of the capital. No cases of the disease were uncovered among 4,832 persons examined, of which 1,478 were children. The current indices of the disease among children under 5 years of age is 3 per 1,000 in Montevideo and 1 per 1,000 in the interior of the country, as compared to 6.6 per 1,000 and 9.6 per 1,000 respectively, at the beginning of the period.

END OF ANTIMEASLES CAMPAIGN

Montevideo EL PAIS in Spanish 31 Aug 77 p 10

[Summary] The vaccination campaign against measles to ward off an expected nationwide epidemic in September came to an end last Sunday. Some 70,000 children were immunized on 15-28 August at 250 permanent and mobile units throughout the nation. There are still 30,000 children who need to be immunized, and it is expected that parents will take their unvaccinated children of 6 months to 4 years of age to the 198 centers nationwide, which will be in operation every day throughout the year and have sufficient supplies of vaccine to take care of all the children.

VENEZUELA

GOVERNMENT ANNOUNCES COMPLETION OF SANITATION PROJECTS

Caracas ULTIMAS NOTICIAS in Spanish 23 Jun 77 p 27

[Article by Carlos Villegas]

[Text] Aqueducts that were constructed by Perez Jimenez, no less, in 1954, and that now appear as work inaugurated by the present administration of the National Institute of Sanitation Works (INOS) in the state of Falcon, will be investigated by the Commission of Comptrollers of the Chamber of Deputies, whose president will travel to Coro next Saturday.

The president of the Permanent Commission of Comptrollers of the Chamber of Deputies, Dr Leonardo Ferrer, spoke yesterday with ULTIMAS NOTICIAS with respect to the future activities of the commission in charge and stated:

"I will travel with the president of INOS, Dr Hector Silva, to the Paraguana Peninsula at the end of the week in response to an accusation made by Deputy Amador Manzano pertaining to projects which the institute announced had not only been constructed but placed in service there. According to the accusation, there are projects such as the aqueducts of Santa Ana and Moruy which this government claims to have constructed but, according to the Minutes and Accounts of the Nation's Government corresponding to 1967, were contracted for and executed in 1966 according to contract No 31 of the same year." Ferrer added, "Announcement was made of the Adicora Aqueduct which was constructed in 1954, by order of Gen Marcos Perez Jimenez, but the most serious charge, according to the accusation, is that in spite of the fact that they were announced in public notices as complete, the Azaro and Cumaragua aqueducts have not been started. These examples," concluded Leonardo Ferrer, "make it necessary that I join the president of INOS in traveling to the area to verify the situation at the site as presented by the institute and by the accuser."

"What is the cost of the project?"

"Bs. 14,798,497.15."

"Will you travel alone?"

"No, I will be accompanied by other members of the commission and by engineers who are expert on the subject."

He concluded by saying that on his return to this city he would produce a report which would be presented to the Commission of Comptrollers for consideration.

Caracas EL NACIONAL in Spanish 10 Jul 77 p B18

[Text] Today we return to Turen to give it projects which mean a better life for its people and, at the same time, increase productive capacity in that privileged region.

Sewers in Villa Bruzual		Bs. 7,800,000.00
Enlargement of the Villa Bruzual Aqueduct		Bs. 2,440,000.00
Labor	Bs. 6,400,000.00	
Materials	2,740,000.00	
Projects	700,000.00	
Inspection	400,000.00	
Total		Bs. 10,240,000.00
Population served: 41,000		

Caracas EL NACIONAL in Spanish 16 Jul 77 p 67

[Excerpts] Since October the national government has delivered sanitation projects which make the atmosphere healthier and more pleasant for the people of Margarita Island, while at the same time they contribute to bringing about other important projects such as the island aqueduct, a final and definitive solution to the old problem of lack of water in the region.

Today the sewers and aqueducts of Porlamar and Los Robles begin service over the eastern port as well as in Boca de Pozo and Robledal in the far western section of the Macanao Peninsula. These projects which include the laying of more than 19 kilometers of pipeline and benefit 35,100 inhabitants of Margarita, are evidence of the desire of the government to project its work through the length and breadth of our country in order to accomplish the common task of building a new Venezuela.

Porlamar

Sewers in the tourist complex El Morro-Intur	Bs. 1,033,920.00
Main sewer of Ave. Cedeno	Bs. 3,924,260.00
Los Conejeros aqueduct	Bs. 1,123,596.00

Los Robles

Sewer projects	Bs. 2,145,100.00

Robledal-Boca de Pozo

Enlargement of aqueduct	Bs. 282,965.00

Labor	Bs. 5,032,000.00
Materials	2,544,555.00
Projects	422,630.00
Inspection	510,656.00
Total	Bs. 8,509,841.00

Population serviced: 35,100

Since 2 October 1976 the national government has delivered 88 sanitation projects for a sum of Bs. 641,053,249.63.

Population serviced to date: 3,512,760 inhabitants in 20 federal units.

Environmental sanitation, goal of the national government.

UNSANITARY CONDITIONS IN VARGAS HOSPITAL

Caracas ULTIMAS NOTICIAS in Spanish 14 Jul 77 p 25

[Text] An invasion of cats, flies and litter in the Vargas hospital was detected by councilwoman Adonis Dager of the FED in an inspection made yesterday of the hospital. The Caracas council will be informed of the findings in a report to be presented this week concerning what she calls a crisis of the city hospitals.

According to a report provided by the municipal official to ULTIMAS NOTICIAS the proliferation of cats in the Vargas hospital extends even to the kitchen.

"Yesterday," she said, "an inspection of hospitals continued with a visit to the Vargas hospital where I was able to prove irregularities of all kinds--human, administrative, physical and technical."

"For example," she stated, "lack of cleanliness is ubiquitous in hospital installations, particularly in the kitchen where gas was also found to be

escaping. This constitutes a serious threat to those who work in that area."

Remodeling Stopped

Councilwoman Adonis Dager indicated that remodeling of the Vargas [hospital] had begun in October 1976 and had stopped in December of the same year. She stated that expensive equipment was unused and neglected.

EPIDEMIC IN TACAGUA DENIED BY SAS OFFICIAL

Caracas ULTIMAS NOTICIAS in Spanish 9 Jul 77 p 46

[Text] No epidemic is affecting the citizens of Tacagua, where children and adults are being treated by medical personnel of the Ministry of Health and Social Welfare (SAS) in the service module constructed by the National Housing Institute.

Dr Jose Gonzalez Cisneros, general coordinator for SAS of the service modules, said yesterday that in the Tacagua area four doctors specializing in general consultation, curative consultation and family planning are working full time. They are assisted by psychologists, sociologists, social workers and other specialized personnel, in a health education campaign. Such campaigns take place periodically in that area.

With regard to preventive medicine, Dr Gonzalez Cisneros emphasized the immunization of the children there through triple vaccinations, poliomyelitis vaccinations and others.

INFLUENZA EPIDEMIC

Caracas EL UNIVERSAL in Spanish 16 Jul 77 p 2-24

[Text] Barquisimeto, 15 Jul--Two more people have died as a result of the influenza (virosis) epidemic which is affecting different sectors of this city. The death toll has now reached six.

The director of the Antonio Maria Pineda Central Hospital, Dr Arion Martinez, confirmed today that some deaths have resulted from the influenza which has affected the population without discrimination as to age or sex.

The hospital director said that a considerable number of persons suffering from the virosis, which manifests itself as influenza, are coming to the hospital every day. The disease's symptoms include pains all over the body, general weakness, and internal affections of the ears, nose and throat.

A source at the Department of Health told reporters that that entity has reported the deaths of two persons during the last few hours. The names and ages of the influenza victims were not given.

Caracas EL NACIONAL in Spanish 19 Jul 77 p D-18

[Article by Eduardo Delpretti]

[Excerpts] Out of every 100 children who come to the J. M. de los Rios Children's Hospital, more than 70 suffer from the influenza virus.

The doctors here say this is a "disastrous" percentage.

They are referring to the large number of mothers who come to the hospital every day to seek a remedy for vomiting, diarrhea, coughing and high fever of their children.

The etiology is 100 percent viral.

The causes of this disproportionate increase in influenza are unknown. Pediatricians affirm that it is not contagious.

This virosis not only attacks children, it also affects adults.

It appears in different forms. Some suffer from high fever and vomiting. Others have a permanent dry cough, and some have both.

The General Public Health Office of the Federal District and that of the Sucre District of the state of Miranda, through the Epidemiological Surveillance Service, indicate that there is no abnormality.

"In the last few days there has been no epidemic outbreak in the metropolitan area," they say.

Local epidemiologists working for the health department said that they are on "permanent alert with medical personnel, so that they can spot any abnormal health situation."

They repeat that at this time there is no proof of an abnormal situation or an epidemic in the capital nor in nearby areas.

HEALTH MINISTRY BANS ALL FOOD STREET VENDORS

Caracas EL NACIONAL in Spanish 19 Jul 77 p D20

[Text] The sale of street food products will be eliminated in the next few days by health authorities because it constitutes a danger to health.

The General Commission of Health of the Ministry of Health and Public Welfare (SAS) of the Federal District and the state of Miranda continues its decision not to grant more permits for the sale of hot dogs, fruits, "chicha" (fermented corn beverage) and other products which may be contaminated.

"The consumption of food sold on the street," said a source, "creates a danger for the public's health and that is why we remain determined not to grant sanitation permits for sales to take place."

The official pointed out the dangers incurred by people who buy such products. Included in this sector of portable stands are barbecues, hot dogs, chicha made of corn and rice, pineapple beverages, sugar cane, watermelon, crystallized sugar cane candy and other confections.

"All of these products are made and handled without the minimum conditions of hygiene. This is the reason for the poor quality."

"Consuming these foods," he added, "can cause gastroenteritis, diarrhea and other diseases."

It was recommended that the population not buy such products which lack sanitary control and are not authorized for sale by the SAS.

Caracas ULTIMAS NOTICIAS in Spanish 25 Jul 77 p 51

[Summary] Citizens of Caracas are opposed to the ban on the sale of hot dogs because they consider it to be "an unjust measure against humble laborers which works against the pocketbooks of the people who are unable to eat in restaurants frequently." In the opinion of consumers queried at various hot dog stands which operate in the metropolitan area, the Ministry of Health's (SAS) ban cannot be explained because hot dogs are one of the most hygienic products. The portable stands use tongs to hold weiners which are previously sterilized in hot steam, bread is not touched by hand and the sauce has already been applied.

In addition they state that vendors will eliminate onion and cabbage in an effort to make hot dogs even more hygienic, and vendors keep their carts in a good condition.

A number of citizens said that the ban on the sale of hot dogs was unfair because many people could make a meal out of hot dogs who would frequently not be able to pay restaurant prices.

A few days ago a statement of the public health commissioner, Dr Humberto Flores, was published in which he stated that a ban would be imposed next Tuesday on the sale of hot dogs in portable carts.

In reference to this the secretary general of the Union of Hot Dog Vendors, Irma Rodriguez, said she was not in the least concerned by that information because it was not true because on Wednesday the 19th they had met with Dr Humberto Flores and Dr Covarrubia, chief of the metropolitan area of the SAS, and Dr Penuela, chief of the division of food.

"At that time," she added, "Dr Flores denied the measure and additionally he agreed to meet with our union next week."

She stated that in the event the answer was negative the union would expend all its resources in defense of the stability of 10,000 workers.

Caracas ULTIMAS NOTICIAS in Spanish 18 Aug 77 p 51

[Excerpt] At present a directive is being prepared stating the minimum conditions under which sales may take place, reported Dr Carlos Gil Garcia.

"The handling of this product," stated Irma Ramirez, secretary general of the Union of Hot Dog Vendors in the Federal District, "fulfills the necessary conditions for their sale."

They ask for courses in the handling of food, and health permits for the sale of hot dogs in the shortest possible time.

"The little carts which sell hot dogs will not be removed because there is no ban on the sale of hot dogs," stated Dr Carlos Gil Garcia, director of the General Secretariat of the Ministry of Health and Public Welfare.

"At present," he said, "a directive is being prepared setting forth the minimum conditions which must be fulfilled by vendors in handling this popular food which is so deeply rooted among the people of Caracas."

Many aspects concerning the handling and sale of the product were considered during a meeting of the representatives of the Union of Hot Dog Vendors of the Federal District and the state of Miranda and the director of the General Secretariat of the Ministry of Health and Public Welfare (SAS).

"We informed Dr Carlos Gil Garcia of the sanitary conditions in which we prepare and sell our product and he was very receptive to our suggestions," stated Irma Ramirez, secretary general of the union, who, accompanied by Isias Marin, secretary of the organization, and Julio Garcia, financial secretary, were interviewed together with the official from SAS.

They explained that the weiner is not touched by hands but by tongs and that, additionally, it is sterilized in hot steam. The sauce is not touched directly either.

"Neither dust nor any other contaminants touch the product," said Isias Marin, secretary of the organization of the Union of Hot Dog Vendors, "because the product is enclosed in a steam container and steam is released each time the hot dog is handled."

"There might be a problem of unsanitary conditions in the preparation of onion and cabbage, but if the authorities consider it necessary we can eliminate these condiments which are served raw," stated Irma Ramirez.

Later on they indicated that they also discussed the sale of chicha (fermented corn beverage) and ice cream with the high SAS official.

"In the case of ice cream," they explained, "there is no danger to health for the client because it is sealed at the factory, but as for the chicha stands, we believe that there could be an improvement in sanitation precautions if the containers were changed. These are presently mostly of aluminum and could be replaced by stainless steel, and in place of ice in large blocks which has to be cut up manually, ice cubes could be used."

Courses in Handling Food Are Requested

At the same time the hot dog vendors requested the health authorities to reinstate courses of food handling in all parts of the country. These courses should be passed by all who in one form or another serve food to the public.

Finally they issued a call to the minister of health and public welfare, Dr Antonio Parra Leon, to inspect the carts in order that they may receive the necessary health permits as soon as possible.

Dr Carlos Gil Garcia, director of the General Secretariat of the SAS, promised the hot dog vendors that they would have an answer to their requests in no less than 10 days.

INFANT MORTALITY RATE CONTINUES POST-1974 DECLINE

Caracas EL UNIVERSAL in Spanish 20 Jul 77 p 2-23

[Text] The general mortality and infant mortality rates in Venezuela continued the decline that has been observed since 1974. They are among the lowest figures in our country as a result of the effectiveness of health services and greater hospital coverage.

The figures obtained show that the rates recorded until 1976 continue to decline. The general mortality rate rose from 6.6 in 1970 to 6.8 in 1973 and then decreased in the following years to 6.2 in 1976.

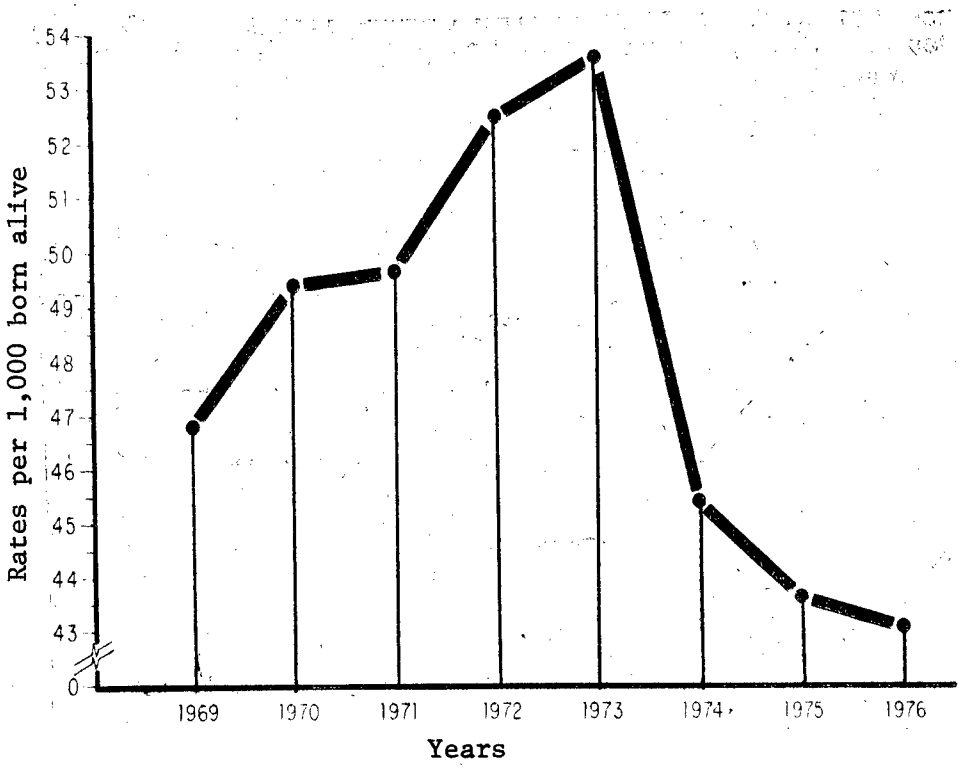
The neonatal mortality rate reached 23.3 in 1973. It decreased to 21.6 in 1975 and 19.8 in 1976 and the post-neonatal mortality rate of 30.13

went down to 22. As to the most sensitive group--from 1 to 4 years--the mortality rate was 5.2 in 1973 and 3.3 in 1976.

The infant mortality rates rose from 46.9 in 1969 to 53.8 in 1973 and then dropped sharply from 1974 to 1976 to reach 43.3. It is estimated that it has decreased further this year.

The notable decline in the infant and general mortality rates are a reflection of the fact that the public health services in Venezuela have improved notably. The efforts made in health protection and care of the infant and general population are yielding obvious results.

Infant Mortality Rates in Venezuela From 1969 to 1976



The graph shows the decline in the infant mortality rate.

Programs to maintain the optimum levels of protection for the infant population are being developed this year. They include using more than 9 million doses of vaccine throughout the country.

Caracas EL UNIVERSAL in Spanish 19 Jul 77 p 2-8

[Text] The recent increase in the morbidity rate because of numerous cases of whooping cough, measles and influenza could have been prevented without the vaccination campaign that the SAS [Health and Social Welfare] is presently carrying out, according to the student leader of UCV [Central University of Venezuela], Erick Rodriguez Mieres, a member of the Federation of University Centers.

He said: "More than 200 cases of gastroenteritis have been found in infants in Puerto Ordaz. In Barquisimeto there are more than 70 and in Zulia State some 56 cases of hepatitis from poor sanitation, especially in the La Concepcion sector."

He added: "Along with this we find a high rate of intestinal parasitosis in the poor sector and in the rural zone because of poor sanitation conditions and a lack of health education."

The young medical student indicated that measles is a preventable disease through immunization. Nevertheless, recently there has been a high incidence because of nonimmunization.

The student leader explained: "The same thing occurs with poliomyelitis which, in spite of campaigns, continues to appear among the protected and the inadequately protected population."

"What is the infant mortality rate?"

"The infant mortality rate in the country for the first year of life is 45 per 1,000 children born, very close to the rate in the 1960's. This indicates that the factors and circumstances involved remain unchanged.

"Enteritis and other diarrheic diseases are the primary cause of infant mortality followed by pneumonias (whooping cough) and measles."

Our informant said that the immunization processes and the techniques presently used in prevention and control have had little effect on the high infant mortality rate.

He also said that the Ministry of Health should not carry out campaigns as a "smokescreen" when the diseases are already spread by the rainy season, which causes abrupt changes in the weather and increases spread of contagious diseases. He added that the SAS would have to jointly plan the operations for the realization of each and every one of these prevention campaigns with the university medical schools.

Caracas EL UNIVERSAL in Spanish 7 Aug 77 p 2-11

[Text] Diarrhea accompanied by dehydration continues to be the primary cause of infant mortality in our country, according to Dr Homero Alvarez, chief of the Pediatric Department of the Miguel Perez Carreno Hospital of the Venezuelan Social Security Institute.

He stated: "Diarrhea has an epidemiological peculiarity so that we can no longer say--as had been defined in other times--that its incidence depends on climate variables."

Dr Homero Alvarez indicated that in other times the arrival of the rain and the appearance of the flies were taken as epidemiological variables. Now the high incidence of diarrhea is noted at any time of the year.

This leads the pediatrician to think that /crowding and the poor construction of housing are the psychological and economic factors that take mothers away from direct care of their children and therefore from personal hygiene/ [in boldface].

Scarcity, contamination and poor handling of food are other causes for the alarming situation according to Dr Homero Alvarez.

Dr Alvarez stated: "Direct public health action can bring an end to the large quantity of excrement observed outside the housing of the people who live in the poor areas of our country."

Dr Alvarez was referring to those poor areas in the hills where the smallest shower can carry the excrement away and scatter it along all the roads in the sector.

Another of the aspects mentioned by the pediatrician is that the mass communications media--radio, movies, television and the press--are responsible for spreading basic knowledge on personal hygiene among the Venezuelan people. The schools should impart knowledge on family hygiene.

Health a Right

Dr Homero Alvarez is a man concerned by the problems that affect the Venezuelan child. For this reason he indicates emotionally that the people must not seek only the comforts of urban life, ignoring the true problems that affect health.

He indicated: "This collective feeling is perhaps the best starting point governments have to develop guidelines directed specifically toward the preservation of health which is the primary constitutional right of Venezuelans."

Also the pediatrician from the Miguel Perez Carreno Hospital reported that a child who has had diarrhea is not cured in the hospital but by influencing the environment in which he lives--that is, creating wholesome conditions in the affected child's home.

TYPHOID OUTBREAK ON EASTERN COAST OF LAKE MARACAIBO

Caracas EL NACIONAL in Spanish 25 Jul 77 p D-20

[Text] Maracaibo, 24 Jul--An outbreak of typhoid fever in Cabimas and other towns on the eastern coast of Lake Maracaibo may have been due to the consumption of produce irrigated with contaminated water.

Dr Elias Anzola Perez, coordinator of epidemiology of the Health and Social Welfare Department (SAS), reported today that this explanation is feasible, because the outbreak would have affected more people if drinking water was the problem.

He explained that to date 14 cases of the 43 suspected cases have been confirmed. Provisions have been made and an epidemiological front has been opened with the application of an antityphoid vaccine of higher quality than that which has been used in Venezuela; the A and B paratyphoid antigens had been excluded because they cause more fever.

He explained that the vaccination is partial because it was not considered wise to carry out a massive campaign which would contraindicate the process of immunization against measles which is currently taking place in Zulia along with the triple vaccination.

The doctor stated that the outbreak is not serious, and the suspected cases are being studied in the Bacteriological Reference Center which operates in the University Hospital of Maracaibo.

GASTROENTERITIS OUTBREAKS REPORTED; DEATHS RESULT

Caracas EL UNIVERSAL in Spanish 19 Jul 77 p 2-22

[Text] Barquisimeto, 18 Jul--Three children have died in the current outbreak of gastroenteritis in this city, at the pediatric ward of Central Hospital.

This situation resulted in a declaration of a state of emergency in this department, which only has two doctors to treat hundreds of children.

The deceased children, as well as other children with the disease at the hospital, are for the most part from the poorer sections of the city and rural areas of the state.

The children who died had entered the hospital with advanced symptoms of dehydration.

In view of this situation, the pediatrics emergency room at Central Hospital is practically overflowing with children suffering from gastroenteritis; the medical and nursing staff is insufficient for treating so many cases, and the state of emergency will reportedly be prolonged for several days, and pediatricians will be called in to help treat the children.

Very young children, between 2 months and 3 years of age, have been brought by their mothers to the hospital, and that institution is appealing to mothers to bring their children instead to medical aid centers in rural areas when they see the first symptoms, because in this way the disease can be controlled in time.

Caracas EL UNIVERSAL in Spanish 12 Aug 77 p 2-24

[Excerpt] Ciudad Bolivar, 11 Aug--More than 1,000 cases of gastroenteritis and 4 deaths have been recorded in the state of Bolivar during the last 55 days, according to Dr Hernan Valladares, director of the university hospital, "Ruiz y Paez."

He said that between the first week of June and 23 July, 750 cases were reported in that hospital alone, and 3 persons died. Meanwhile, 51 children are in the rehydration ward.

He said that the emergency room was full of children from Soledad, Moitaco, El Tigre, San Felix, Upata and even Pariguan, which means that the disease has a large radius.

He repeated that rumors about the appearance of new cases of meningitis are true. Dr Valladares stated that in the last 2 months 10 cases of meningitis have been reported, 2 of which were brought from El Callao. There were two deaths.

He admitted that at the present time the number of cases of gastroenteritis is increasing daily; the majority of the patients are from the poorer areas, and from the interior of the state.

"We are taking the necessary measures to lower the incidence of the disease, at least in Ciudad Bolivar, according to medical checkups which are being carried out in the poor sections of this city," the director of the hospital concluded.

Caracas EL UNIVERSAL in Spanish 28 Jul 77 p 2-15

[Text] Enteritis-causing bacteria are not the only cause of gastro-enteritis; viral particles, specifically Rotavirus particles, are directly involved as causal agents of this serious illness. This information is revealed in the conclusions of a thesis for a Master of Science degree in biology presented at the Venezuelan Institute for Scientific Research (IVIC) by Dr Berta Viera de Torres.

The thesis, entitled "Rotavirus and Gastroenteritis. Epidemiology. Partial Physicochemical Characterization," is divided into two parts. One studies the Rotavirus-gastroenteritis relation from an epidemiological point of view, and the other partially characterizes the physicochemical structure of the Rotaviruses.

The epidemiological results were obtained from a study of 293 children of less than 5 years of age who suffered from gastroenteritis, and 66 control cases of the same age group, admitted to the emergency room of Children's Hospital in Caracas. Dr Viera de Torres tells us of the importance of this study:

"Until now, it was believed that certain bacteria, such as Escherichia coli enterotoxica, Shigella, and Salmonella were the causes of this disease, which is the most common cause of death among children under 2 years of age, and the second most common among children from 1 to 4 years of age. However, it was not possible to identify the responsible agents in the majority of cases studied. In our study, the Rotaviruses were the most frequently discovered pathogens (they were discovered by an electron microscope) in the feces of the children with gastroenteritis, with a positivity factor of 41 percent."

Dr Torres explains that the Rotaviruses were detected in all age groups under 5 years, even though the greatest incidence was observed in the group of children of 13 to 24 months of age. The youngest patient in which the Rotaviruses were found was less than 4 days old. The maximum percentage of positivity of these viruses was observed between the first and sixth days of the development of diarrhea; after that time, positivity diminishes significantly.

Another important aspect of the work of Dr Berta de Torres is that there do not seem to be differential clinical signs in the bacterial and the viral forms of gastroenteritis. The Rotavirus infection seems to be related to the months in which the average temperature is lowest.

The author of "Rotavirus and Gastroenteritis" tells us that it would be premature to draw epidemiological conclusions because her study represents a short experience in research which would require at least 4 to 5 years of continuous study. She adds:

"We have continued the epidemiological study of this virus, and we also want to make a more extensive study of some of its antigenic and physicochemical characteristics which might allow us to think of some immunological means for protection against viral infection."

CURRENT STATISTICS ON INCIDENCE OF DISEASES

Caracas EL UNIVERSAL in Spanish 28 Jul 77 p 1-4

[Article by Pedro J. Alvarez]

[Excerpts] The increase in the venereal disease problem has caused great concern in the health and welfare sector. With the advent and use of penicillin among the medications effective in the treatment of venereal diseases, it was thought at first that the final stage of the definitive eradication of the latent danger of these terrible diseases had been completed. But the experiences of the last few years have dashed these hopes, as was demonstrated in the excellent speech made by Dr Luis H. Rodriguez Diaz at the headquarters of the National Medicine Academy of Venezuela recently. The figures he mentioned appear in the Epidemiology and Vital Statistics Annual of the Ministry of Health and Social Welfare; they are tragically clear: in 1974, in a population of 9,146,695, there were 15,686 cases of syphilis, 35,001 of blennorrhagia, 712 of soft chancres, 101 of venereal lymphogranuloma, and 48 of poradenitis or Nicolas-Favre disease. These figures are all calculated on the basis of every 100,000 inhabitants. However, in reality the situation is much worse: the number of syphilis cases is actually double those figures, and other venereal diseases are actually four times the above-mentioned figures. In any case, in the above figures, syphilis represents 45 percent of the rest of the diseases of the same type which were studied. As far as anyone knows, up to 1977 these figures have been increasing, which leads us to ask the serious question: What should we do in the present and the future in view of the threat which these diseases present to the human species and its progeny?

A detailed study of the problem has revealed some of the main causes of the increases. The principal and most important of all causes lies in the increased resistance to penicillin of the pathogenic bacteria which cause venereal diseases. This means that stronger and stronger doses of the antibiotic must be administered. Another factor is that of the sensitivity in some cases of patients who have become allergic to penicillin. This requires the use of other antibiotics such as the tetracyclines and erythromycin, which are not nearly as effective as penicillin. It is interesting to note that in the beginning the reduction in venereal disease, especially syphilis and blennorrhagia, was so great because of antibiotics and the high degree of optimism and confidence that the problem was definitively solved, and that the precautions inherent in prophylaxis and the rigid therapeutic control which were formerly applied in these

cases, were less and less precise and careful. The result was an inevitable increase in the number of cases. Similarly, as is the case with many infectious-contagious diseases, the true cause often remains unknown or is hidden by the disease itself. The latter frequently occurs in the case of soft chancres among women, because the symptoms are less apparent than in men. The same thing happens with syphilis and blennorrhagia, although to a lesser degree. All this contributes to a greater incidence of venereal diseases.

We must add that another factor is the peculiarities which modern life has caused especially among our youths and adolescents. Among girls, the main concern is preventing pregnancy, and greater attention is given to the proper use of birth control pills than to the prevention of possible venereal infections. They even object to men using prophylactics, considering them to be a useless precaution and not very manly. The inevitable consequence is venereal infection.

Caracas ULTIMAS NOTICIAS in Spanish 1 Aug 77 p 20

[Article by Coromoto Alvarez]

[Excerpts] A marked decrease in diseases such as tuberculosis, measles and septicemia, which were among the 10 most common causes of death, has taken place as a result of actions taken by the Ministry of Health and Social Welfare, in stepping up its programs for maximum levels of protection not only of the infant population, but of the population as a whole.

It has been reported by the ministry that avitaminosis has been moved to the 13th place, and the mortality rates for syphilis and its complications have dropped considerably.

It was announced that this year the ministry, on the instructions of Minister Antonio Parra Leon, will give 9.5 million doses of vaccine; these vaccines play a major role in the battle against diseases which can be prevented by immunization, and their results can be seen in the decreases in the general and infant mortality rates.

Caracas EL NACIONAL in Spanish 15 Jul 77 p C9

[Text] Porlamar, 14 Jul--Nueva Esparta has the lowest tuberculosis mortality rate in Latin America, according to Dr Dagoberto Becerrit, chief physician of the Antituberculosis Service of the state of Nueva Esparta.

He added that in Nueva Esparta there are currently 25 cases which have been located and are under control by means of the secondary, tertiary and quaternary networks which are spread throughout the state. He said that thanks to these measures, the disease is totally controlled and

supervised with treatment at all levels; even the most remote dispensary has adequate resources, because nurses have been trained for this purpose.

Dr Becerrit adds that in Nueva Esparta the incidence of tuberculosis is fairly low, and the mortality rate is the lowest in Latin America: barely two deaths for every 100,000 inhabitants. He stated in addition that the Regional Tuberculosis Service carries out educational campaigns not only for doctors, but for all rural personnel trained in Nueva Esparta. As a provision against tuberculosis on the island, in only 15 days 100.2 percent of the campaign's goal was achieved when 55,000 children under 15 years of age were vaccinated with BCG. On the island of Coche another vaccination campaign was carried out, and the goal was also achieved.

Caracas ULTIMAS NOTICIAS in Spanish 18 Aug 77 p 12

[Excerpts] A large part of the population which is apparently healthy actually suffers from toxoplasmosis, to such an extent that in Venezuela it is estimated that more than 60 percent of the adult population is infected with this parasitic disease. Most of these people have no symptoms.

This was revealed by Dr Nestor Araujo, adjunct physician for the Obstetric Service of the Santa Ana maternity clinic of the Venezuelan Institute of Social Security. He also stated that toxoplasmosis is a cosmopolitan parasitic disease which is transmitted from animals to men. He explained that the parasite is different from others in that it can be found in all warm-blooded animals, including birds, and in all the climatic zones of the world.

"The means of transmission," he added, "is through direct contact with secretions and excretions (saliva, urine and feces) of domestic and wild animals which carry the parasite (dogs, cats, parrots, etc.) and through the consumption of milk and raw meat in foods such as meatballs and hamburgers in which the meat is not well cooked. However, the incidence of the disease is higher in tropical regions which are humid and low-lying, especially in areas of a low socioeconomic level."

Dr Araujo said that toxoplasmosis can be congenital or acquired. "The most frequent form is congenital, and it is estimated that of every 6,000 births one child is born with toxoplasmosis. The infection occurs especially in the second part of pregnancy in women with a latent or acute infection, and although some authors deny it, it has been demonstrated that it influences obstetric accidents such as abortions, premature births or stillbirths. When the child is born with toxoplasmosis acquired congenitally through the placenta, serious problems may result, such as hydrocephalia, cerebral calcifications, inflammation of the choroid membrane and the retina (chorioretinitis), encephalomeningitis, bronchopneumonia and hepatitis, among others."

Twenty percent of these children die within the first year of life, according to Dr Araujo; 2 percent die in the second year, and 75 percent survive the disease with serious brain defects such as hydrocephalia, idiocy, psychointellectual retardation, cerebral paralysis, spasticity and convulsions. It is estimated that 17 percent of all brain defects are the result of congenital toxoplasmosis.

REVIEW OF HEALTH CARE FACILITIES, IMPROVEMENTS

Caracas ULTIMAS NOTICIAS in Spanish 30 Jul 77 p 27

[Text] At any moment an emergency could be declared in a Venezuelan hospital because of the contamination of numerous patients through infections caused by microorganisms, contracted in the animate or inanimate atmosphere of this welfare center because there is no systematic control of this problem.

Every hospital should have at least one epidemiologist in charge of controlling bacteria to see that patients or attending personnel with transmissible diseases do not cause infections among the patients through dust, cleaning operations, food, equipment, surgical materials, etc.

But despite the importance of this matter, only the Hospital del Sur, in the city of Maracaibo, and the University City Clinic in Caracas have an epidemiologist. Dr Alejandro Mondolfi, the epidemiologist assigned to the Clinic's Transmissible Diseases Service, explains that since the end of 1976 a program for the control of hospital infections has been in operation there, but that they lack sufficient resources to be more effective.

The clinic has 140 beds, he said, and to care for the same number of patients it has only one secretarial office. There should be nurses trained in epidemiological control and a laboratory used exclusively for constant bacteriological analysis. For the time being, he said, we have the collaboration of the principal hospital laboratory which normally is busy with routine work.

Dr Mondolfi said that any infection contracted by hospitalized patients which was not present in the individual at the time of his admission is considered a hospital infection. The most frequent infections of this kind are urinary infections caused by mishandling of catheters, respiratory infections, gastroenteritis and so forth.

He added that strict control should be exercised over patients more susceptible to infection, such as cancer and lymphoma patients, kidney transplant and cardiovascular surgery and obstetrics patients in order to prevent complications which could be fatal.

The best investment which could be made, he added, is prevention. Not, as at present when cases are treated only when the problem becomes critical. In the United States, for instance $1 billion a year is spent on bacteriological control in welfare centers.

Caracas ULTIMAS NOTICIAS in Spanish 2 Aug 77 p 17

[Article by Ricardo Marquez]

[Text] Councilor Adonis Dager has deposited in the 14th Magistrate's Court proof of the grave crisis existing in the Concepcion Palacios maternity ward, where the risk of infection is extremely dangerous for mothers giving birth and for newborn infants.

As has been reported, Councilor Adonis Dager denounced before the Ninth Penal Court of the First Instance a crisis in the Concepcion Palacios maternity ward, charging that the care given there is extremely bad and a mortal threat to mothers giving birth there and to the newborn.

The judge of the Ninth Court, Dr Alberto Martinez Moncada, commissioned government attorney Dr Rafael Rodriguez Corro of the 14th Court to begin the necessary investigation.

Yesterday the Federal District councilor issued a statement which was taken by the doctors of the maternity ward to the director pointing out the serious state of infection existing in that hospital ward, particularly in the delivery room, and also denouncing the proliferation of flies in the area.

The government attorney agreed to make a personal inspection to check on the truth of the written statement with particular emphasis on death certificates of women in childbirth and of newborn infants, in order to determine whether the serious infection reported has had fatal consequences.

Caracas ULTIMAS NOTICIAS in Spanish 28 Jul 77 p 27

[Text] Barquisimeto, Aug 1977 (Special)--The Family Planning Clinics have become one of the best aids in the detection and prevention of diseases of women, according to the commissioner general of health, Dr Miguel Moreno, on announcing the creation of a new consultation service at Antonio Maria Pineda Central Hospital and the extension of the service to other rural communities in Lara.

"In effect," said Commissioner Moreno, "through the family planning conferences we have also accomplished works of preventive medicine, and in addition it is leading to the discovery of important data on conception

disorders and the interest of couples using these services in protecting themselves from unwanted pregnancies."

Taking at random some figures from the program, which began to function officially in the state of Lara at the end of 1975, the commissioner of health showed that in a single 6-month period attention has been given to almost 20,000 persons.

"Of these 20,000, more than 8,000 exploratory biopsies were performed of which 21 were positive, which were duly treated. This shows that the service is one of the best aids in the detection and prevention of diseases such as cancer of the vagina; in addition, we have also been able to meet couples who want to conceive but cannot do so because they have organic or functional difficulties, which we can treat or refer the couples to medical services which specialize in such disorders."

Speaking of the expansion of the program, he announced that at present there are 13 clinics in the capital of Lara and another 10 in rural communities such as Cabudare, Sarare, Siquisique, Moroturo, Bobare, Guanare, Guarico, Arenales, La Pastora and El Jabon.

"We have opened a new clinic in Antonio Maria Pineda Hospital, and already we are extending them to other rural medical facilities; in addition, we have expanded the schedule of the clinics, which allows us to see a larger number of persons."

In order to carry out his program, the Lara commissioner general of health indicated that negotiations are underway for the provision of supplies, donation of equipment, furniture and material, which will be sent to each of the new units and for which his office is working closely with the central office of the program in Caracas.

As one can see, he said, the state of Lara has experienced outstanding advances in the field of family planning and will continue to advance, since the program includes a new period of training for doctors, paramedics, medical students, counselors, social workers and individuals.

DANGER OF DISEASE FROM FLIES, COCKROACHES AND RATS

Caracas EL UNIVERSAL in Spanish 10 Aug 77 p 2-21

[Text] La Guaira, 9 Aug--Hundreds of people, children and adults, are exposed to gastrointestinal ailments and paralytic rabies through the presence of swarms of flies, cockroaches and rats in the Aqui Esta neighborhood of Maiquetia in the department of Vargas.

The inhabitants of the populous neighborhood have issued an SOS to all official offices of health, sanitation and public works in order to find

a solution in a short period of time to the many problems which have been latent there for more than 4 years.

The neighborhood is divided in the north by a gully in which are found tons of debris, waste products and dead animals.

This alone serves to attract vermin which enter the houses and contaminate food and water. On more than one occasion children have been victims of rodent bites as they rested in their cribs.

For more than 16 years the squads of the malaria division have not fumigated the gullies nor has the Office of Municipal Works ordered that the channels be cleaned, and to complete the chaotic panorama the Department of Sanitation is outstanding for its absence.

SUMMARY OF CURRENT IMMUNIZATION PROGRAMS

Caracas ULTIMAS NOTICIAS in Spanish 10 Aug 77 p 12

[Text] It is possible that another epidemic of measles may develop during the present year, because of the accumulation of susceptible persons, that is to say children and young persons who have not had the disease and who have not received their dose of vaccine.

This was stated by Dr Homero Alvarez, head of the Pediatrics Service in the Miguel Perez Carreno Hospital of the Venezuelan Social Security Institute. He also indicated the need for conducting a publicity campaign, in order to inform the public in general on the preventive steps to be taken.

He said that measles is an eruptive disease of infancy, highly dangerous in children over 5 years old, as well as in human organizations never subjected to immunity, like indigenous communities.

When he was consulted on the possibilities of contagion, Dr Homero Alvarez stated that measles is highly contagious and has the peculiarity of being contracted precisely when it has not been diagnosed either by the physician or by the members of the family before the eruption breaks out.

The forms of contagion are direct, from person to person, by emanations of contagious droplets through the nose, eyes and mouth.

Immunization Is Fundamental for Preventing the Disease

The head of the Pediatrics Service in the Perez Carreno Hospital stated that collective and individual drives are necessary, in order to combat the disease. Individual drives are conducted with children coming to medical consultation.

Immunization against measles is, at present, the best prophylactic measure. Its application is indispensable, in order to have a 100 percent certainty of not contracting the disease after the age of 12 months, because at that time the immunological resistance transmitted by the mother to the child does not act.

Fifty Percent of Measles Deaths Observed in Children Under 1 Year Old

Later, the Social Security pediatrician stated that 50 percent of the measles mortality occurs in children under 1 year old. Therefore, immunization is recommended after the child is 6 months old, although it may be repeated at the age of a year and a half without harming the child. Repetition of the vaccine causes no harm, if it is administered in a 2-year period.

Finally, he made a series of recommendations to mothers and said: "Because children are persons susceptible to the disease, they should never be exposed to contagion. It is absolutely necessary to avoid crowds. Nevertheless, once the disease appears, the mother should provide the child with basic care, including the discreet use of antipyretics (to reduce fever), the administration of abundant sugared liquids to the patient, body and environment hygiene and consultation with a pediatrician for the purpose of preventing future complications."

Caracas EL NACIONAL in Spanish 2 Aug 77 p C6

[Text] Over 600,000 children immunized against measles, diphtheria, tetanus and whooping cough is the goal to be achieved by means of the massive immunization campaign started yesterday by the Ministry of Health and Social Welfare all over the country.

The announcement was made in a press conference called by the commissioner general of health of the SAS [Health and Social Welfare], Dr Jose Manuel Padilla Lepage, who was accompanied by Dr Damaso Villarroel, head of the Maternal-Infantile Division, Dr Heriberto Echezuria, director of epidemiology, Dr Rafael Travieso, head of Epidemiological Supervision, and Dr Alvaro Llopis, assistant director to the health commissioner in the Health Office.

Dr Padilla Lepage stated that the agency under his charge hopes to immunize, house by house, a total of 400,000 children against measles. It is also estimated that the triple vaccine--against diphtheria, tetanus and whooping cough--will be administered to a total of 600,000 children.

The SAS officials pointed out that the campaign that was begun yesterday all over the country has the purpose of developing prevention against those diseases by protecting the population susceptible of contracting them, whose ages primarily range between 2 and 35 months.

The health authorities also stated that immunization against poliomyelitis, administered successfully starting at the age of 1 year, and administration of the BCG [Bacille Calmette-Guerin] vaccine, which protects children under 15 years old against tuberculosis and leprosy, are also included in that prevention program.

When a brief evaluation was made of last year's campaign, the figures revealed the amount of 1,651,678 doses of BCG, 720,000 doses of yellow fever vaccine, 1,445,000 doses of triple vaccine, 2.6 million doses of antipolio vaccine and 484,000 antimeasles doses. Altogether, 8.4 million doses were administered to Venezuela's infantile population.

The results of those immunization drives are clearly visible. In the case of measles, morbidity dropped 42.4 percent and mortality 30.9 percent. Diphtheria was reduced in morbidity by 63.2 percent and in mortality to 16.7 percent. The morbidity of whooping cough increased 17 percent, but mortality decreased 36 percent.

Who Will Be Immunized?

In the case of the measles vaccine, the population susceptible of being immunized includes every child whose age ranges between 9 and 35 months. Exception is made of any minor immunized last year who has contracted the disease or who has a fever at the time of immunization.

Concerning the triple vaccine, all children whose ages lie between 2 and 35 months will be immunized.

The same cases indicated for measles will be exempted from immunization. In both cases, the vaccine will be administered by injection and house by house in those places where there are human resources to accomplish it. Immunization will end of 15 August.

Finally, the health officials appealed to parents to view with understanding and civic responsibility the immunization of their children, in order to prevent subsequent complications because of these diseases that cause a high death rate in the infantile population.

Caracas EL NACIONAL in Spanish 24 Aug 77 p D12

[Text] Next Monday, the health authorities will begin an immunization campaign to prevent possible outbreaks of diseases of the skin, hepatitis, measles and gastrointestinal disorders among the residents of Caricuao and Las Adjuntas as a consequence of the dust that has been contaminating those sectors when the marsh built up by the floods dried up, according to Dr Jose Casanova, coordinator of the immunization work.

Dr Casanova stated that, up to now, over 20,000 persons have been vaccinated with antitetanus and antityphoid toxoids, primarily against gastrointestinal diseases.

"Nevertheless, next Monday we shall expand the campaign with vaccines to prevent possible outbreaks of hepatitis, poliomyelitis, diphtheria, whooping cough and measles, in addition to the diseases previously mentioned.

"So far, we have taken care of the population normally. There has been no shortage of vaccines. But we are concerned, however, over the almost imminent possibility that epidemics of skin diseases, especially scabies will break out owing to the crowding of persons because of the emergency and the lack of water."

The EL NACIONAL reporters went to the emergency command headquarters to obtain further information on victims, missing persons, the number of injured and the amount of losses. But it was not possible to interview the chief of operations, Gen John Kavanagh Illaramendi, on whose behalf Mary Cruz de Rodriguez, in charge of the INAVI [National Housing Institute] agency in Caricuao, received us.

"So far, I can only inform you that we are working to full capacity and that we have overcome a good part of the emergency. It will be necessary to await the results of the computations made concerning figures on deaths, missing persons and an estimate of losses.

"I should like to add that General Kavanagh has appealed to persons not residing in Caricuao to refrain from traveling to the area, because it makes traffic, and consequently operations, difficult."

The newsmen were able to observe that, unlike Monday, yesterday the volume of traffic moved more smoothly, because army personnel and teams of workers from the agencies incorporated in the emergency command, as well as residents and volunteers, had cleared the roads quite a bit, removing trash, debris, broken-down vehicles and mud.

Caracas ULTIMAS NOTICIAS in Spanish 15 Aug 77 p 33

[Article by Cheo Gomez]

[Text] A crowd, mostly made up of angry mothers, tried to take the building of the Baruta Health Unit by assault, when the health employees working there stopped working, jeopardizing the lives of the children and other persons receiving antirabic treatment.

According to reports furnished to the reporters, the employees of that care unit declared themselves on strike and abandoned their place of work

important laboratory equipment to be used in analyzing and preparing antigens for vaccines and diagnostic tests of the diseases described above.

In addition, Dr Convit believed that the experimental program on the transmission of human leprosy to the armadillo is in a very important phase. The colony of armadillos amounts to 120 species. The results of the initial research are truly stimulating, according to what Dr Convit pointed out.

Concerning control of leprosy in our country, Dr Convit stated that there is strict control and treatment of leprosy through 30 specialized centers under the Health Dermatology Service of the SAS and incorporated in the pertinent health commissions.

Caracas EL NACIONAL in Spanish 10 Aug 77 p C3

[Text] Massive immunization to protect the residents of Caracas from tuberculosis will start in the Federal District as soon as school activities begin.

This information was supplied by Dr Manuel Adrianza, head of the Department of Tuberculosis of the SAS. He added that in the Fourth Tuberculosis Convention, held in Coro, a special report on antituberculosis immunization in Venezuela was discussed. It was submitted by him and coreporters from the states of Cojedes, Falcon, Nueva Esparta, Trujillo, Bolivar, Lara and Tachira.

"That paper," he said, "pointed out as a positive fact the administration of 2,764,633 doses in every state and federal territory during last year."

The total number of doses of vaccine administered amounted to 4,346,164, but only 15 states completed their campaigns with the percentages anticipated in the goals. Four federal agencies are in process of completing and three have not attained 50 percent of the goals. Nevertheless, it was pointed out that the results amounting to 76 percent of the goal proposed in the massive campaign, with exception of the Caracas metropolitan area, are an unprecedented figure and highly satisfactory for the aims of the program.

Caracas EL UNIVERSAL in Spanish 11 Aug 77 p 2-11

[Text] The production of the Rafael Rangel National Hygiene Institute, under the Ministry of Health and Social Welfare, has recorded a good amount of doses of various vaccines. This was stated by Dr Tomas Goldstein, head of the Division of Biological Product Preparation in the

INN [National Nutrition Institute], when he pointed out that, although the division has been in process of restructuring and reorganization in 1977, the preparation of vaccines has been kept up and, between January and June, the production amounted to 428,000 doses of antituberculosis vaccines, 800,000 doses of freeze-dried smallpox vaccine, 735,000 of triple vaccine, 282,400 of canine antirabic vaccine, 108,360 of human antirabic vaccine, 25,128 of cholera vaccine, 870,000 of tetanus toxoid and 705 bottles of antigens for fever diagnoses.

He also pointed out that the production of some of these vaccines should be increased, in order to meet the country's needs. This will be possible, when the pertinent facilities have been improved. A technology by means of the use of fermentors is being applied for the purpose of increasing production. Recently, there was an investment of 150,000 bolivares for buying this kind of equipment, which will make it possible to increase production without acquiring more space. The Rafael Rangel National Hygiene Institute has contracted an adviser from the Lister Institute, England, within the development of this activity.

Dr Goldstein stated that the institute's program includes the forthcoming opening of a modern laboratory for producing tetanus toxoid, thus expanding the facilities provided with the safety recommended in these cases by WHO with regard to their operation in an isolated building. This laboratory will be inaugurated by Dr Antonio Parra Leon, minister of health and social welfare, and with the INH [National Hygiene Institute] Board of Directors attending.

He pointed out that the laboratory to be opened shortly, in accordance with an order of the Board of Directors of the institute, will bear the name of Dr Felix Luciani Lairet, one of the first Venezuelans in the SAS services who worked on the preparation of vaccines. He abandoned private practice as a physician, in order to promote this work and he devoted himself full-time to public health programs. He was retired after 45 years of service.

Finally, Dr Goldstein stated that, in the opinion of qualified advisers, the laboratory of the National Hygiene Institute for producing tetanus toxoid will have the most spacious and adequate plant facilities in South America with regard to that biological preparation.

OUTBREAK OF MEASLES, 65 DEAD SO FAR THIS YEAR

Caracas EL UNIVERSAL in Spanish 15 Aug 77 p 1-15

[Excerpt] It is possible that this year a new measles epidemic is developing, because of an accumulation of susceptible people, i.e., children and youths who have not had the disease and have not been vaccinated.

This was reported by Dr Homero Alvarez, chief of the pediatric service of Miguel Perez Carreno Hospital of the Venezuelan Institute of Social Security. He also expressed the need to carry out an information campaign so that the general public may know what preventive methods to follow.

Caracas EL NACIONAL in Spanish 17 Aug 77 p D7

[Text] The Ministry of Health, through its General Health Office, has revealed that there is no threat of a measles epidemic in Caracas.

The acting general commissioner of health, Dr Isidro Toro Alayon, reported that such a threat does not exist, according to research undertaken by the office and in view of the progress of the vaccination campaign.

Dr Toro Alayon indicated that the supposed epidemic could be emphatically denied, because the record of cases in the metropolitan area is less than the number recorded during the same period last year. This means a decrease of measles cases.

Caracas EL NACIONAL in Spanish 20 Aug 77 p C3

[Text] Maracaibo, 19 Aug--So far this year 2,328 cases of measles, with 65 deaths, have been recorded in Zulia, according to the latest figures received this afternoon by local health authorities in the interior regions of the state.

Dr Elias Anzola Perez, epidemiologist for the cooperative health services of the region, said that in the week that ends today 79 cases of measles have been recorded in Zulia, with five deaths.

Last year, he indicated, 1,518 cases were recorded in the state during this same period, with 12 deaths. The figure for this year is already 2,328 cases with 65 deaths, which means that we are witnessing an outbreak of measles.

He said that all necessary measures have been taken to control and diminish the effects of the outbreak.

LIST OF CURRENT HEALTH-RELATED CONFERENCES, PROGRAMS

Caracas EL UNIVERSAL in Spanish 16 Aug 77 p 1-18

[Article by Juan Inojosa]

[Text] Until now, we have not been informed about the biological characteristics of the Venezuelan and do not know what are his normal levels of

cholesterol, hemoglobin, triglycerids, glycemia, urea or his intelligence quotient and his aptitudes.

Project Venezuela initiated a survey of 250,000 persons from all social strata and different ethnic groups to obtain a general sampling and to derive therefrom an optimum sampling of 75,000 persons from 0 to 19 years of age.

"For the first time an inventory will be taken of the Venezuelan population," said Dr Hernan Mendez Castellanos, director of Project Venezuela, "to establish its characteristics of growth and development on the basis of reliable data. We will learn what a Venezuelan is from an anthropometric, mental development, dental, osseous, sexual, taboos, beliefs, as well as his cultural level standpoint."

Dr Mendez Castellanos is heading the Presidential Commission for Studies of Growth and Human Development. The other members of this commission are Drs Mercedes Lopez Contreras, Maria Carmona de Chacon, Marucha Senior de Ponce, Nancy Montero Sanchez, Guillermo Tovar and licenciados Lila Ruiz de Mateo Alonso and Carlos Noguera.

More than 100 specialists are working on Project Venezuela.

As an example, Dr Mendez Castellanos stated that when a blood sample is taken from a Venezuelan and he is told that it is normal, that he is not suffering from anemia, the doctors are comparing his blood with the blood of a group of Englishmen examined some years ago.

He added, "We do not know our biological reality, and the schools of medicine and all of the schools associated with medical science are teaching foreign characteristics, parameters which do not correspond to our reality. One of the objectives of this study is to arrive at national reference characteristics. We are going to analyze approximately 40 biochemical elements in serum, blood and glycemia; and for the first time we are going to investigate sensory problems: diseases of seeing and hearing."

During Project Venezuela, research will also be done on endemic thyroidism to obtain a true national sampling of this disease. Work will also be done on the problem of diabetes and arterial hypertension.

"We are going to determine normal arterial pressure in Venezuela, as well as the normal pulse rate," declared Dr Mendez Castellanos. "Data concerning tension combined with data about fats in the bloods will also give us information about the incidence of myocardial infarcts and arteriosclerosis."

Importance of the Project

A multidisciplinary team made up of anthropometrists, psychologists, sociologists, odontologists, social workers, nutritionists and language

therapists is working on the Project Venezuela. The repercussions of this national research into Venezuelan man are incalculable.

"We are going to ignore the repercussions of a scientific nature, which are of undeniable importance," said Dr Mendez Castellanos, "and will start by saying that CORDIPLAN [Office of Coordination and Planning] will have a picture of the most depressed population of the country; the Ministry of Health will know the normal values of the upper middle class between the ages of 0 and 20 years and will be able to draw a comparison between the normal and pathological, as well as other serious health problems."

Preliminary Observations

Recent measurements of children in Caracas have yielded alarming results. In the middle upper and upper economic sectors, individuals attain a height of 12.5 centimeters in 30 years, which is equal to 4 centimeters per decade. That is what is called a secular trend and occurs in every country that is developing. This implies not only greater height but also better nutrition and better intellectual capacity. On the other hand, in the lower socioeconomic groups, the situation is quite different. These groups lack the secular trend and there is a secular decline. That situation is observed in the indigenous groups of the United States and Central America where it appears that they were not measuring shorter but in comparing a 6-year-old child with another of the same age 30 years ago, the former is shorter, which implies something serious. It means that some groups are improving biologically at the expense of others. These evaluations are on the basis of only small samplings.

Caracas EL NACIONAL in Spanish 10 Jul 77 p B-14

[Interview with Dr Daniel Piuzzi by Eduardo Moncada]

[Excerpts] One of the subjects which will be considered by the 1st National Sports Congress to be held from 12 to 15 July 1977 in Central Park will deal with sports medicine.

Dr Daniel Piuzzi, coordinator of the area commission for sports medicine, stated that the initial step to promote sports medicine in Venezuela is the training on an emergency basis of doctors specialized in this sector; however, he offered the clarification that these doctors should be able to count upon the services of physical trainers, nutritionists, psychologists, etc.

Dr Daniel Piuzzi, age 36, is a cardiologist specializing in cardiopulmonary physiopathology; he received his training in El Algodonal in the service of Dr Manuel Adrianza; he is a professor of the physiology of exercise at the Caracas Pedagogish University Institute. When he was 18, he participated in several sports: high jump, pole vault, shot put, etc. However, according to him, he was never outstanding in any of them.

[Question] How many sports doctors are there in Caracas?

[Answer] There are many doctors here who over the years have been closely connected with sports, including: Francisco Leon, Jose Martinez Morales, Albino Bobb, Hernando Escobar, Victorino Navas, Leoncio Jaso and Javier Rodriguez. In Maracaibo there are: Gustavo Baptista, Arnaldo Luzardo and Jorge Alfy, who are working in the Institute of Work Medicine at the University of Zulia; at the University of Los Andes, Manfred Hartung is heading a working team.

[Question] Where would a sports medicine team work?

[Answer] In a work center set up for this purpose.

[Question] What has been done to get such a center?

[Answer] Dr Hernando Escobar is working on the structuring of a complete team to set up this center. Steps have been taken with the National Institute of Sports.

[Question] Are there doctors who specialize in sports medicine?

[Answer] In Venezuela Dr Victorino Navas worked at this specialty for 3 years in Europe. He is now living in Caracas.

[Question] Are the sports doctors organized?

[Answer] There is a society that groups these doctors and calls itself the Venezuelan Society of Medicine of Sports, which is recognized by the Medical Federation of Venezuela. This society brings together doctors connected with sports activities.

[Question] Will the 1st National Sports Congress be beneficial?

[Answer] Naturally. There is a general belief among the public that sports are limited to the activities of athletes on the playing fields. Sports are more than that; they include many things: legislation, planning, installations, physical education, recreation, sports medicine, human resources, etc. During this 1st National Sports Congress, these points will be covered. For that reason, I think that it will be beneficial to Venezuelan sports.

[Question] Who are members of the area sports medical commission?

[Answer] Drs Hernando Escobar, Daniel Gutierrez, Jose Martinez Morales, Victorino Navas and myself, as coordinator; Eduardo Fereda and Edgar Perez.

[Question] What organizations are represented by this commission?

[Answer] The Ministry of Education, the Ministry of Health and Social Welfare, Venezuelan Society of Sports Medicine, National Institute of Sports, Caracas Pedagogish University Institute, Central University of Venezuela, Vargas Hospital of Caracas and Vargas Hospital of La Guaira.

[Question] Is it correct to say sports medicine?

[Answer] We prefer to call it medicine of sports, as that is the term recognized throughout the world. It would not be proper to say work medicine; the proper term is medicine of work. Well, the same is true in our case.

Along with medicine of work, medicine of sports was born; however, the former separated itself to devote itself to its specific activities. Later, after a long period, medicine of sports sprang up again as the Venezuelan Society of Medicine of Sports for doctors connected with sports activities. However, before this society was recognized by the Venezuelan Medical Federation, much time went by and its members became discouraged.

Caracas EL UNIVERSAL in Spanish 27 Jul 77 p 2-18

[Text] Venezuela is effectively keeping up its campaign against venereal diseases through the use of an organization specifically delineated in a doctrine which includes the factors which may contribute to the presence of this kind of diseases.

This statement was made by Dr Cornelio Arevalo, deputy chief of the Department of Venereal Diseases of the Ministry of Health and Social Welfare, as he summed up several points related to venereal diseases in the country. He said that because of the good organization now present it is possible to face up to the problem with positive results. He stated that the network of antivenereal services is being expanded, along with the necessary personnel. Last week, for example, the antivenereal service of the Maracaibo University Hospital was placed in operation.

Some 150 entities are now in service throughout the country ready to control venereal diseases.

Dr Arevalo said that the Department of Venereal Diseases of the Ministry of Health and Social Welfare is continuing to carry out its respective plans, based on programming and general supervision for the proper functioning of the services, with the application of the necessary research and the planned confrontation of the problem of venereal diseases.

Caracas EL NACIONAL in Spanish 27 Jul 77 p C-6

[Text] A study for the prevention of ischemic cardiopathy was started yesterday by a group of Italian and Venezuelan specialists, under the guidance of Dr Oswaldo Barrios, director of Cardiovascular Diseases of the Ministry of Health and Social Welfare.

Ischemic cardiopathy is a disease of the heart produced by the physical degeneration of this organ, which can lead to cardiac infarct.

During the meeting, an analysis was begun of the areas which the project should cover.

Dr Oswaldo Barrios explained that this is the first time that a European country has worked with a Latin American country in research on cardiovascular diseases.

Dr Barrios stated, "A group of Venezuelan cardiologists is participating in this project, including Drs Gonzalo Pieters, Simon Munoz, Ivan Machado, Bartolome Finizola, who have been engaged in the study of cardiovascular diseases in general, ischemic cardiopathy and the control of several risk factors which the last-named disease may exhibit."

The team of researchers includes Drs German Camejo, IVIC [Venezuelan Institute of Scientific Investigation], who has done work on the importance of a vascular factor in the genesis of arteriosclerosis; Virgilio Bosch, from the Experimental Institute of the Central University of Venezuela; and Italian specialists, Giorgio Ricci and Giancarlo Urbinati, who in collaboration with other professionals, have since 1972 been the promoters and developers of the Project for the Primary Multifactoral Prevention of Coronary Cardiopathy in Rome.

Dr Ricci is the director of the Institute of Medical Therapy. He has been working for 25 years on scientific studies and research, particularly in connection with the epidemiology, physiopathology, clinical aspects and therapy of metabolic diseases. He is one of the founders of the study group of the antiarteriosclerosis campaign. In his country, he has promoted community activities in the preventive medicine sector and is the director of the Medicine Center of the Ministry of Education of Italy.

Dr Urbanati [sic] is the deputy director of Medical Therapy of the University of Rome. He is a member of the Roman group responsible for the prevention of coronary cardiopathy and coordinator of the same for the World Health Organization.

Today, the team of Venezuelan and Italian cardiologists plan to visit the Institute of Experimental Medicine. They will receive information on the studies conducted there which are connected with their specialties.

Caracas EL NACIONAL in Spanish 4 Aug 77 p C-9

[Text] San Cristobal, 3 Aug--The 24th Annual Convention of Gastroenterology of Venezuela and the second Colombia-Venezuela meeting was opened in this city today with 150 delegates in attendance, both foreigners and Venezuelan.

A symposium and conferences on the advances in the medical-surgical treatment of ulcers will be included among the most important scientific proceedings of this conference.

Foreign delegates attending this convention include: Drs Morton Burrel, Gerome Waye, Jorge Misiewiecz, from Brazil; Arecio Penaloza, Lopez Escobar and Mario Negrete, from Colombia. The Venezuelans in attendance include: Dr Joel Valencia Parpacen, a noted specialist from Caracas.

Other matters to be presented to the convention of gastroenterologists are advances in digestive radiology, a conference on colonoscopy and a study of gastric cancer.

The annual assembly of specialists in gastroenterology of Venezuela and the foreign guests will also consider 68 free-lance works and five medical-scientific films.

Caracas EL UNIVERSAL in Spanish 7 Aug 77 p 1-18

[Text] The uncoordinated increase in medical schools, to the detriment of the professionals in this sector, in the opinion of Dr Aloysio De Salles Fonseca, president of the Pan-American Federation of Associations of Faculties (Schools) of Medicine [FEPAFEM] is one of the most serious problems in this branch of learning.

"This uncoordinated growth of schools and the number of students," he said, "has resulted in a shortage of professors and training sites which have created a situation difficult to resolve."

He added, "Consequently, efforts have been made to improve the systems of new technologies integrated into the educative process in all of the institutes which provide this kind of training. FEPAFEM is permanently engaged in the development of programs and solutions to these problems, and has often participated in local solutions in centers which have requested it."

Later he said, "I think that the transfer of the headquarters of FEPAFEM, with the generous help of the official sector, has provided the federation with new resources of work elements and implements for medical education which gives us a glimpse of the near future recognition of Caracas as the capital of medical education of the entire continent."

"FEPAFEM," he added, "is considered to be the most important organization on the continent dealing with problems of medical education. Through national associations it exerts an influence upon all of the medical schools and allows them to participate in its permanent activities through courses, conferences, etc. From the institutional point of view, the federation continues to function as an organization increasingly closer to the medical schools and its impact will be felt in the immediate future."

"It is worth mentioning," he asserted, "that there are criticisms offered which permit the leaders of the federation to utilize variable strategies suited to each of the regions under study, without imprinting them with a single style.

"The idea of the federation is to respect the solutions considered suitable for the national situation in each country. The federation accepts the various countries and respects national principles of action."

Caracas EL NACIONAL in Spanish 7 Aug 77 p D-7

[Text] Coro, 6 Aug--A round-table on pulmonary mycosis was held during the 6-day National Workshop on Tuberculosis and Pneumonia which was held in this city, with more than 100 delegates from the entire country in attendance.

Clinical diagnosis, treatment and the general evolution of the disease, as well as the agents which are involved in it, were among the topics discussed by the round-table.

Each of the speakers used slides to illustrate his talk.

The round-table was chaired by Dr Alberto Angulo; and speeches were given by Drs Ladislao Pollak, president of the Venezuelan Tuberculosis and Pneumonia Society; Cesar Rodriguez; Maria C. de Arbonoz; Luis Yarbal; and Eduardo Carballo.

Caracas EL UNIVERSAL in Spanish 13 Aug 77 p 2-9

[Text] The Ministry of Health and Social Welfare is committed to progressively perfecting the conditions which will make it possible to hold courses of this kind and to improve the implementation of our anti-tuberculosis campaign, in the conceptual, technical and operational aspects, responding to the health situation in the country in the sector of this disease.

These words were spoken by Dr Jose Manuel Padilla Lepage, director of public health of the Ministry of Health and Social Welfare, during the

opening ceremony of the 8th Regional Course on the Epidemiology and Control of Tuberculosis which began yesterday, Thursday, at the National Tuberculosis Institute of the "Jose Ignacio Baldo" Hospital Complex in El Algodonal, under the auspices of the Pan-American Health Organization and the Ministry of Health.

He said that the continuation of these courses in Venezuela is an indication that the country continues to have the acceptance and confidence of the Pan-American Health Organization and of the countries of the region to hold such courses.

He said that the participants should submit their observations about the course before returning to their work centers, for in this way suggestions will be obtained for the improvement of courses which will be held later.

He stated that it was a positive sign that personnel from different disciplines were attending the course, including doctors, nurses and bacteriologists, all members of the health team responsible for carrying out the antituberculosis campaign, because this encourages and consolidates team spirit, brings uniformity to the criteria and assures the continuity and regularity of the sequence of actions.

He said that the antituberculosis campaign is one of the most firmly rooted in the health field in Venezuela and is the result of the dynamism of incorporating scientific, technical and administrative advances which are utilized as weapons in this campaign and which have brought about noteworthy operational changes. At the present time, work is moving forward on the incorporation of all of the establishments which dispense medical services in the development of programs, as well as the integration into the system of other organizations in the health sector of the country. This process will permit coverage of more of the population and consolidation of the advances achieved.

Dr Padilla Lepage expressed the wish that the course would be a success and greeted all of the participants from foreign countries and Venezuela in the name of the Office of Public Health.

The chief of the Department of Tuberculosis and Other Pulmonary Diseases of the Ministry of Health and Social Welfare, Dr Manuel Adrianza, brought out in his talk the salient aspects of the study plan which will govern the course, as well as its objectives. He pointed out that the antituberculosis campaign programs should carry out actions designed to meet the demand of the community and to maintain, so long as justified, the vaccination of newborn babies and children less than 1 year of age. In addition, vaccinations should be administered to attain an 80 percent vaccination rate for the susceptible groups from 7 to 15 years of age, in accordance with the epidemiological characteristics of each region and the determined risk of infection.

Finally, detected cases should be followed up with a bacteriological examination to discover the greatest number of cases and to assure the cure of same with modern treatments and to thus cut the chain of infection.

He recalled that the evaluation of the Venezuelan program since 1974 supplied the figures which recently appeared in the tuberculosis journals of Coro which demonstrated that BCG vaccination was administered in 20 states and two Federal Territories, with 76 percent of the goal set for these entities achieved. He pointed out that the program for the integration of detection and treatment in all of the health institutions had attained a figure of 67 percent in the 11 states programmed for tuberculosis which have enough drugs for 1 year, as the supplies from the previous year for the treatment of cases detected with new techniques permitted a start with a reserve of drugs of nearly 70 percent of the requirements for the year. Thus, treatment will be available for the sick until June 1978.

Dr Alfredo Soteldo, representative of Area I of the Pan-American Health Organization, spoke on the aspects of the doctrine and structure prevailing in health organizations, in their capacity as autonomous health institutions, such as the Pan-American Health Organization and WHO.

NO DANGER OF EPIDEMIC IN FLOODED AREA REPORTED

Caracas EL UNIVERSAL in Spanish 24 Aug 77 p 2-22

[Excerpts] There is no danger of any epidemic among the people affected by the flooding of the Guaire River and the affluent streams, because the Ministry of Health and Social Welfare has protected the community by means of vaccination.

This was reported by Dr Alfredo Arizaleta, chief epidemiologist of the General Health Office of the Federal District and the Sucre District of the state of Miranda.

Dr Arizaleta indicated that "the immunizations which are now taking place are the antityphoid and antitetanus vaccines; other preventive vaccinations have already been given to the large infant population in this area and in the rest of the country."

Before this emergency situation arose in the health department and other government organizations, the infant population susceptible to foreseeable diseases such as measles, poliomyelitis, diphtheria, whooping cough and tetanus were protected by means of a campaign begun the past 12 August.

The doctor pointed out that the first and only antimeasles vaccine, as well as the first dose of the triple vaccine to immunize against diphtheria, whooping cough and tetanus, took place before 12 August. With regard to the following doses, that is the second and third, they will begin on the

5th and the 16th of September and the 3d and 14th of October, respectively. The last campaign against poliomyelitis left the population protected against that disease.

Finally, the epidemiologist said that the office is still in an emergency situation, operating in the affected areas 24 hours a day and continuing to send medical-surgical and other types of supplies, and mobilizing human resources, so that disease can be combated effectively.

HEALTH MINISTRY CAUTIONS AGAINST GARBAGE IN STREETS

Caracas EL UNIVERSAL in Spanish 26 Aug 77 p 2-12

[Excerpts] Large areas in Caricuao, Valmore Rodriguez, Puerto Verde, Las Adjuntas and 20 blocks in Ruiz Peneda fumigated.

Some 50,000 people vaccinated against typhoid and tetanus.

Inhabitants of Caricuao and other flooded areas were alerted today to the advisability of not throwing waste products, refuse or trash on the banks of the Guaire River because it would not only make the work of the fumigation squads difficult but render fumigation almost useless.

The warning was issued by Dr Francisco Blanco, director of malaria and environmental health of the Ministry of Health (SAS), whose offices have mobilized several squads to fumigate the area affected by the torrential rains of last weekend.

Summing up the work accomplished between Monday and Thursday, Dr Blanco reported that the process of fumigation has been carried out at night, in particular, and 300 hectares have been covered daily.

"Materials used in fumigation are not dangerous to health, first because it is a matter of a temporary mist, and secondly because it occurs in uninhabited areas at night. What we are trying to prevent is the proliferation of insects, particularly of Aedes Aegyti and Culex as well as cockroaches and (sic) creeping insects."

Dr Blanco estimates that the operations in the area carried out by his department of malaria and environmental health will take 2 weeks longer.

ANTIMALARIA EFFORTS

Hanoi TAP CHI HOAT DONG KHOA HOC in Vietnamese No 7, Jul 77 p 45

[Text] Recently the Institute of Malaria, Entomology and Parasitology made a preliminary recapitulation of the malaria eradication work in 1976. During the past year the institute uncovered 4,336 carriers of malaria parasites out of a total of 958,190 persons who took blood tests. Some 3,902 of them--40.7 percent [sic]--lived in the interior.

Last year malaria was still mainly concentrated in the provinces of the former Zone 4, especially in Quang Binh Province, Thanh Hoa Province, and the Vinh Linh zone. In 1976 the ratio of people infected with malaria parasites in Quang Binh Province declined. In Thanh Hoa and the Vinh Linh zone, that ratio was much higher than in 1975 because of an inability to control the sources from which the disease developed in a number of villages in the Thanh Hoa border area and the Vinh Linh mountain region.

Among the mountain region provinces, the ratio of people infected with malaria parasites increased greatly because the basis for discovering and managing the disease is still weak. For that reason a number of epidemics broke out, which increased the total number of people infected with parasites to 557.

Last year extensive treatment contributed to reducing the sources of the disease in the epidemic areas, and the number of malaria areas slowly declined. The number of persons treated increased to 610,661, principally in the provinces of the former Zone 4. Mobile treatment teams were well organized in a number of provinces in order to assure the slogan "emphasize disease prevention, promptly treat the disease." Specifically, in a 9-month period in 1976 blood tests were given to 958,190 persons--71.2 percent of the plan--and 36.5 percent of those tested had malaria. The number of blood tests given at the treatment bases increased and amounted to 44 percent of the total. Although the task of detecting the disease in the villages has made progress it is still weak in the production bases of many localities and much greater efforts must be made.

In 1977 the institute will strengthen its measures for detecting and managing malaria victims in the villages and production bases, especially in the key areas.

Hanoi NHAN DAN in Vietnamese 25 Jul 77 p 1

[Text] VNA News Release--Twenty years ago (July 1957), in accordance with the recommendations of the Ministry of Public Health, the government

decided to form the Institute of Malaria, Parasitology and Entomology. With the assistance of many relevant sectors, especially the positive participation of the army and the ethnic group peoples in the malaria areas, the institute's cadres concentrated on scientific research in order to lower rapidly the percentage of people who have the disease. Malaria, which was a widespread disease in the mountain region, and which had a mortality rate of between 25 and 45 percent of the people who contracted the disease and an average ratio of parasites in the blood of between 10 and 20 percent, has now been essentially eliminated in the north. In the resistance war and especially during 2 years of complete liberation, the task of preventing and fighting malaria in the provinces of the south attained major accomplishments. After trying out the eradication of malaria in Song Be and Nghia Binh provinces, large-scale, effective antimalaria measures were expanded to many key areas in which nearly 4 million people live. In the past malaria was a disease which had spread over an area amounting to two-thirds of the national territory and with a population of more than 5 million, but now it exists only in pockets. In 1976, the number of people who had malaria was 14 times smaller than in 1958, before the campaign to eradicate malaria was launched. The ratio declined from 56.4 percent to 3.9 percent of the population and only 8 percent of the villages remained in the malaria area.

In order to be of effective service to the task of eradicating malaria and preventing and countering the diseases caused by parasites and insects, the institute has also paid attention to doing a good job of scientific-technical research. During the past 20 years the institute has researched more than 500 important topics, more than half of which concerned disease prevention and treatment, while also creating a basis on which to advance to an eradication of malaria in our country. With the guidance of Professor Dang Van Ngu, a Labor Hero and the first head of the institute, who contributed his life to science, the nurses and doctors of the institute have simultaneously studied and worked, advancing from the easy to the difficult, from the simple to the complicated, and from topics of only an applied nature to topics of valuable basic scientific research.

The promotion of scientific research has contributed to guiding and overcoming the new difficulties that have arisen in the process of eradicating malaria. On the basis of the successes of the valuable scientific research projects, the institute has brought forth a plan to eradicate malaria in our country essentially by 1980.

The institute has also participated in researching a number of topics regarding parasitology and entomology, such as threadworms, hookworms, ascaris, amoebic dysentery, liver flukes, etc., mosquitoes which spread encephalitis, dengue fever, mites which spread plague, etc.

Hanoi NHAN DAN in Vietnamese 22 Aug 77 p 4

[Text] Fifteen provinces and municipalities in southern Vietnam have set up malaria control stations. A number of provinces in Eastern Nambo have formed management and malaria control organs at the district and inter-village level. The Malaria, Parasite and Insect Branch Institute located in Ho Chi Minh City has opened professional refresher courses on malaria control for 33 doctors and over 3,500 village-level cadres.

According to the results of recent basic investigation work in Song Be Province, the trial province, the rate of incidence of malaria in blood samples dropped from 11.34 to 5.32 percent and the clinical malaria rate dropped from 11.35 to 5.26 percent. Some 109 villages in 24 districts have virtually completed basic malaria investigation work.

VACCINATIONS AGAINST PLAGUE, CHOLERA, HEMORRHAGIC FEVER

Hanoi HANOI MOI in Vietnamese 3 Aug 77 p 4

[Text] Since the beginning of this year 1,600,000 vaccinations have been given in Cuu Long Province against hemorrhagic fever, cholera and plague. Furthermore, nearly 260,000 homes have been sprayed with insecticide to control mosquitoes.

HEMORRHAGIC FEVER IN HANOI

Hanoi HANOI MOI in Vietnamese 9 Aug 77 p 2

[Text] During June 1977 the Hanoi Hygiene and Disease Prevention Station and the hygiene and disease prevention units of the wards and districts of Hanoi Municipality conducted routine surveys in order to spot at once the first victims of hemorrhagic fever. In addition they prepared adequate quantities of mosquito insecticide and repaired insecticide sprayers so that an epidemic could be stamped out immediately.

Recently, after verifying the locations of incipient hemorrhagic fever, the Hygiene and Disease Prevention Station quickly assembled the ward and district hygiene and disease prevention units to discuss positive measures intended to eliminate these infested areas rapidly.

The conferees agreed to:

--Organize immediately the spraying of infested areas with mosquito insecticide, which is to be completed within 3 days, followed 10 days later by a second spraying.

--Assign cadres to follow up and supervise the identification of newly infected individuals in order to provide quick treatment and to prevent the spread of an epidemic.

--Have all mechanical and chemical equipment and supplies ready for immediate use when needed.

ZAIRE

SERIOUS PROBLEMS OF CHILD MORTALITY EXAMINED

Kinshasa ZAIRE in French No 463, 20 Jun 77 pp 19-21

[Article by Nganzele Mosolo]

[Text] An almost insignificant communique going out over the antennas of the Voice of Zaire, however, it is replete with information. Listen: about 3,900 deaths recorded between January and March 1977 by the Mama Yemo Hospital in Kinshasa alone, of which 1,914 occurred at the hospital, and 1,918 en route to or outside of the hospital. About half of these cases were caused by measles and its consequences (Kwashiorkor).

Following the "Ebola virus" which decimated the populations of localities in the Bumba Zone, the measles epidemic indeed trod on the heels of that calamity, ravaging Kinshasa, if not the country. At the Mama Yemo Hospital children were dying of it at the rate of 30 to 40 daily. We verified this with our own eyes. The pediatric service, which has more than 15 doctors available, was swamped to the point where some children died not of the disease itself but rather for lack of prompt care. Doctors stated that several recorded deaths were caused by respiratory arrest--which in itself is common--due to clogging of the respiratory passages by secretions. If not attended in time this obstruction causes anoxia and results in death by suffocation.

This situation has been attributed to inadequacy of the infrastructure, human as well as equipment. Thus, for example, in the emergency and intensive care wards alone (the very core of pediatrics), whose daily patient load exceeds 200 children, only three doctors, assisted by six nurses, are working--not without dedication.

Six Hours in the Morgue

To cast this inadequacy in relief, the case of the child who spent 6 hours in the morgue appears very enlightening. It unquestionably shows the swamping of the pediatric services and their difficulties in the face of the extent of the epidemic.

Taken to the hospital on 22 March the infant was some time thereafter pronounced dead. The death formalities followed without further delay. Here is the report of the hospital in this matter, which we give along with all the vicissitudes of the case: "Arrived in convulsions, gaze revulsive, abdomen supple, liver enlarged, crepitating and sub-crepitating rales." Some time later, pronounced "dead at 1830 hours, from measles," the baby was placed in the morgue. And the parents went home where the funeral vigil was organized, without a date fixed. However, at 2300 hours there was general surprise at the hospital. The child was found to be alive. In the morgue! Rather, read the doctor's report: "Dead (?) at 1830 hours and sent to the morgue. That is true. A pediatric nurse who went to the morgue discovered a child moving among the dead. St Peter perhaps did not need him. Rather good color, satisfactory cardiovascular, bilateral sub-crepitating pulmonary rales, considerable enlargement of abdomen and liver...."

The next day, the medical report continues, "moves well, rather pale, vacant stare, rather weak respiration, decreased pulmonary volume... general hypothermia." A little later, "He cries when he is pricked. He needs a transfusion to recover." And in the evening, "the child sleeps quietly." The following day the found baby "rather good, sucks his mother's breast, respiration OK, right side crepitating rales, general condition guarded." And at last on 30 March, the cure. The child was pronounced "general condition OK." Saved in extremis!

The clinical history of this child--far from seeming unusual to us--can only serve as an unprecedented illustration of the painful working conditions under which the health services are laboring, and which cannot contain the measles which has become endemic. The inadequacy of the infrastructures is indeed highly incriminating. Also, nearly all the doctors approached have confirmed the imperative need to increase the staff of nurses first, and assure their quality as well as that of the already existing physical infrastructures.

The Paradox

Increase the nursing staff! Yes, it is easily said. Such an act of faith. But Kinshasa has barely two training schools for nurses which, even with improvement of their facilities and increase in their student capacities cannot satisfy the city's need for nurses, considering the population explosion. Then, how can we explain the Health Ministry's suppression of private auxiliary training schools for nurses when the government does not have enough of them available? Cannot the government provide for distraint of such establishments, by rigorous controls, for example, while providing them with equipment capable of improving the training?

Upon this point, however, some doctors state that the suppression of these many private schools had the basic aim of stopping the proliferation of "assassins" from these establishments. For, they believe, the courses

given by these private institutions had no consequential scientific value. Thus the government, out of concern for the welfare of the people, could not abandon the lives of its citizens into the hands of "irresponsible persons and sharpers of all extremes." The step, it cannot be gainsaid, is unquestionably very logical. However, the existing infrastructures are far from able to meet the situation. The entire problem therefore remains. Because, in what way is dying at the hands of sharpers different from dying as a result of the inadequacy of the infrastructures? This is the paradox.

Still some doctors point out the maintenance of some schools notably those belonging to religious orders. But there is more to the story than the instances and explanations already given; nurses declare that the low pay constitutes the basic reason for the human deficiencies revealed. When even though they give of body and soul, sometimes working 24 hours at a stretch, the remuneration is not very encouraging. Thence to cultivation of a certain lack of professional conscience, a certain antipathy and insolence toward patients is only a single step--which, moreover, is widely traversed by a goodly number of nurses.

Some medical interns themselves, whose contribution it is appropriate here to praise, are not better paid or satisfied. They also prefer the medical training of nongovernment organizations and commercial companies.

Face the Most Urgent Need First

For containment, be it ever so little, of this generalized infant mortality, doctors consider that the rapid establishment of pediatric centers throughout the zones of the capital is essential, or rather, highly imperative, in order to face the most urgent need first, especially when it is recognized that 55 to 60 percent of the Zairian population consists of children of ages 1 to 15 years. Such centers would be called upon to serve three or four zones each. It is not easy for parents who live in Kimbanseke, for example, to reach the Mama Yemo Hospital in time with an urgent case. Besides, an operation of large scope such as the present vaccination drive should be institutionalized, without waiting for irreparable damage. Popular education should also be the primary motivation and preoccupation of the preventive services, which will encourage parents to alleviate certain dietary deficiencies and to bring their progeny to the hospital as soon as a case, even a mild one, occurs. For a poorly nourished body is easy prey to germs and viruses that lie in wait for us at every turn. One then inevitably comes to the purchasing power of families, reduced by the economic crisis. Decidedly the situation partakes of the "socioeconomic." When it is realized that the economic conditions the social, it is easily understood that the economic difficulties with which the country is confronted constitute a serious strain upon the blossoming of social life. However, there are glimmers of hope on the horizon, notably with the prospects of foreign capital in Zaire which will be called upon to merge with Zairian interests in a mixed economy for the purpose of realizing

economic development, and why not integral with the country? Which will also bring about ipso facto the emancipation of social life. To sum up, in answer to the question, "Is there hope for public hygiene?" we believe there is grounds for not despairing, so long as it remains true that where there is life there is hope.

MALARIA VACCINE

Kinshasa ELIMA in French 30 Jun 77 p 4

[Text] In Africa every year, 1 million children die of malaria! And yet, since 1974, in the United States and Great Britain, the advances in science have permitted the experimental immunization of man and certain animals against this chronic and acute disease, often fatal when it is not treated at all, or treated too late.

Caused by a microscopic parasite, the "plasmodium," found in the red corpuscles of human blood and transmitted from one individual to the other through mosquito bites, this deadly disease causes several attacks, of which the first bouts are particularly violent, especially in subjects not yet exposed to the disease, and in children living in areas where this "bog disease" rages. Malaria is not only the most deadly among all parasitic diseases, but also the most widespread. Australia and Europe have wiped it out during the last decades, but it is still rampant in areas located rather approximately between 60° North and 40° South.

343 Million Persons Not Protected

This painful disease was or remains endemic for altogether 2,015 million persons in contaminated regions. In the areas where malaria was "eradicated," that is, rooted out, 824 million men live. In areas covered by programs of eradication or fighting, 848 million may be counted.

In Africa there are still 343 million persons living in areas where the disease is endemic, and not yet protected by any antimalaria measures! This disease therefore poses a serious problem for public health, in about 60 countries numbering altogether some 600 million, particularly Africa and Asia.

In the tropical countries where the endemicity is high and transmission occurs throughout the year, we are faced with a vicious circle of disease and underdevelopment: the people are sick because they are poor; they become poorer, the longer they are sick, and they are sicker, the more they suffer from poverty!

The Rockefeller University of New York has just attained decisive advances as regards the laboratory culture of the blood form of the malaria parasite. Henceforth there are more chances for perfecting a vaccine, but it

seems that a number of investigations are required before man is really able to overcome this deadly disease.

INTOXICATION CAUSED BY PESTICIDES

Kinshasa ELIMA in French 30 Jun 77 p 4

[Text] Cases of intoxication induced by pesticides are mostly the result of a lack of precautions and a misuse of these products.

This is the conclusion particularly interesting for developing countries, which are often compelled to resort to these substances of delicate handling, to put up an effective fight against the numerous and dangerous parasites of their crops.

From the health point of view, among other specialists, Dr Francisco J. Dy, who is more particularly concerned with Africa and the West Pacific area, declared that to simply and purely ban the use of pesticides would not constitute a real solution.

How would it then be possible to achieve a suitable and genuine safety in using pesticides? According to Dr J. Copplzstone, of the Division of Vector Biology and Antivector Struggle in Geneva, the number of cases of pesticide-induced intoxication recorded in the world is "substantial." In other words, this figure represents 2.5 to 5 percent of all accidental poisoning cases. This specialist estimates that 500,000 cases of acute pesticide intoxication are responsible every year for more than 9,000 deaths in the world.

The Example of Africa

This risk should therefore not be treated lightly. That is why Dr Adam, of the Pesticide Department at the FAO Headquarters [United Nations Food and Agriculture Organization] at Rome, considers that internationally valid official regulations would constitute a first and effective step toward insuring safety in the use of pesticides.

The rate of increase in pesticides was highest in Asia between 1971 and 1973. It rose indeed to 35 percent. Meanwhile this growth rate was reduced to a considerable extent, dropping from 35 percent to 8 percent from 1975 to 1976, as a result of the energy crisis.

Believing that reduction of the use of pesticide would endanger the assurance of crops in a country, Dr Adam specified that this loss of yield in the Asian crops was between 30 and 50 percent.

It is nonetheless true that pesticides--or rather their imprudent and careless use raise considerable risks.

Many African countries have given in this area, a salutary example by regulating the use of these products which may prove to be "the best or worst of things."

WRAPUP OF EPIDEMIC DISEASES FOR 1976

Kinshasa ELIMA in French 6 Jul 77 pp 3, 6

[Article by Tshiabujile Ntumba Konji]

[Text] In order to be personally aware of the exact number of cases of both epidemic and endemic diseases treated in our central and rural clinics, grouped around the medical establishments to which they are attached, we recently paid a visit to the Center of Regional Public Health Inspection, when we had the opportunity of talking to the regional medical inspector, Citizen Muamba-wa-Mbuyi Nyindu, who was kind enough to reassure us with regard to the situation of these diseases in the East Kasai. Current diseases ranging from the simplest to the most complex were observed there. Some of these diseases are referred to through a commutative designation. These are the cases recorded by names such as eye diseases, ear diseases, diseases of the circulatory system, diseases of the respiratory tracts, other verminoses. In the case of the latter, we should like to have specified the number of cases of ascaris, eel-worms, trichocephaloses, rather than find them all buried under the heading "other intestinal hominthiases."

If indeed in 1975, the number of new cases was 872,583, in 1976 it dropped to 827,747, i.e., a reduction by 44,836. Naturally it is not sufficient just to establish a situation, but the cause must be ascertained so as to furnish the remedy. It must be admitted that during the whole of 1976, the supply of pharmaceutical products to our health establishments from the DCMP [expansion unknown] was reduced to a considerable extent. This version is the more acceptable because it is known that drugs represent the arsenal par excellence of our medical establishments. As regards the medical report proper, we believe our comments on it under the previous headings "endemic and epidemic diseases" were adequate. However if we have to revert to some cases, it is because of their particular morbidity. In this sense, it is interesting to note that tuberculosis is clearly decreasing, i.e., 313 cases less than in 1975. It would be premature to draw any conclusion as to a real regression of the disease, although a certain long-term optimism cannot be excluded, taking into account the BCG vaccination campaign implemented by the CNEV [expansion unknown], extended systematically in all maternity and infant welfare clinics, as well as the efforts at promoting better nourishment.

Leprosy stands out with 419 cases more than in 1975. We do not believe there is any special recrudescence of the disease, but rather a more sensitive awareness of the problem, and greater attention devoted to it by our health establishments.

For trypanosomiasis, a special detection effort was undertaken: 59 more cases than in 1975. While it is certain that the infected area (Tshofa, Lubao...) was reduced to a considerable extent following the campaign of the FOMETRO [Tropical Medicine Fund] group, there are surely many diseases escaping this control. The collection of data we were able to obtain from the cases referred to indicates that malaria retains here, as well as all over our district, the highest frequency rate with 149,961 and 52 deaths, and appears to be at the head of the list as cause for days of hospitalization or rest. Gonococcemia infections are also widespread with 15,781 cases detected and 7 deaths. This is one of the most persistent among the endemic diseases in the Eastern Kasai, with 11,482 cases recorded and 1 death. We may assert here without fear of being contradicted, that among the tropical parasitic diseases raising public health problems, bilharziasis may be listed directly after malaria. Although its frequency is comparatively low, tuberculosis too keeps its hold, and remains at the head of the list as the most deadly endemic disease with 2,029 declared cases and 93 deaths.

Meanwhile leprosy also comes close to this rate, with 1,602 cases and 8 deaths. To close this chapter we should like to emphasize the persistent nature of endemic diseases such as syphilis with 376 declared cases, trypanosomiasis with 311 cases and 14 deaths, and finally the last in the series, yaws, with 93 declared cases. It is true that a large number of cases of endemic diseases are not declared. However, taking a look at the medical inspection statistics of the Eastern Kasai, it is observed that measles is still the undisputed leader among the causes of infant mortality: 14,414 cases recorded against 239 deaths. Although influenza is less deadly, it retains the highest frequency rate with 19,687 cases and 13 deaths. As regards dysentery in its different forms, it follows immediately with a frequency of 12,508 cases and 31 deaths. Whooping cough stands out as well with 6,601 cases and 6 deaths. Some diseases whose frequency of occurrence is low, prove to be as deadly. These include meningitis with 352 cases against 55 deaths, streptococcus angina with 31 cases declared and 27 deaths, and tetanus, 221 cases and 25 deaths. The medium rates of occurrence are mentioned in sequence: viral hepatitis with 2,946 cases and 21 deaths, chickenpox with 2,499 against 2 deaths, followed by mumps with 1,585 cases. In conclusion we may mention a much reduced and even rare record of diseases such as poliomyelitis with 122 cases and 6 deaths, acute infectious encephalitis in 5 cases, and 1 case of death from typhus.

Measures To Be Taken:

Although health education must remain the constant goal of the medical authorities, we should like it to become a steadily increasing concern of our medical institutions, in spite of the additional effort this would entail, for lasting results in regard to health will only be achieved on the day that our entire population has a better grasp of the mechanism of transmission of the endemic diseases, and the means of protection against

them. We suggest the habit be made of arranging periodically for a brief educational talk within the scope of the dispensary or a prenatal or infant welfare clinic. Meanwhile we should like to draw the attention of all to a better appreciation of infant mortality and its causes. We also suggest that they attempt to determine the infant mortality rate and the causes of these deaths, for example in a given collective or area.

However, vaccination must be undertaken even occasionally with the vaccine received. Meanwhile the medical authorities are encouraging very much antipoliomyelitis vaccination, provided both the shots (VAV and BCG) are measured and one is morally certain with the support of the control, that the children will receive their second and third doses of vaccine. As for DIP, we do indeed encourage it, without however, laying too great a stress on it, in view of the work involved, and the reduced frequency or gravity of these diseases in our area of East Kasai. Within the framework of our school medical inspection, we request that systematic examinations of stools be made in schools, followed by antiparasite treatment, and whenever possible, examination of a certain number of thick drops from the age of 6 to 12. It is likewise the duty of our hygiene groups to spread periodically molluskicide as far as possible in strategic points of all waterways, recognized as being particularly infested with mollusks-carriers of the bilharziasis parasite, being conscious that among the parasitic tropical diseases raising public health problems, bilharziasis comes immediately after malaria.

Besides this we request that all our medical establishments give free treatment to tuberculosis victims, lepers, trypanosis patients, and other indigent persons. We emphasize that they should not claim that this represents paternalism in these cases because, apart from the fact that it is a question of diseases, we cannot, if we wish to put up an effective fight against these diseases, allow their treatment to depend on the good will of the patients, and not their financial possibilities.

Conclusion

Besides these health problems, we still have to feel our way, and for this purpose, suggestions from our medical establishments would be of great value to us, types of information furnished by inquiry at the time of medical inspection, permitting them to evaluate, with the means at their disposal, better the work which is being performed and the problems met with in this connection. Among other things we believe it would be interesting to receive from the medical centers reports of certain instructive achievements or facts obtained at first-hand.

PROGRESS MADE IN FIGHT AGAINST SCHISTOSOMIASIS

Kinshasa ELIMA in French 14 Aug 77 p 4

[Article by NAP]

[Text] A West German research worker, Prof Wilfried Haas, has just perfected a method for killing the larvae of trematodes--the cercariae--before they can penetrate into the human body.

This is an important discovery because these worms cause infections of unquestionable seriousness in the intestines and bladder. At present this infectious disease propagated by fresh water larvae affects more than 200 million persons in Africa, Asia and Latin America.

Haas, professor at the Zoological Institute of the University of Wuerzburg, has found a method of "drowning" these cercariae in the very water in which they develop. The scientific "trick" in this case consists of "deceiving" the trematode larvae, which belong to a class of flat worms parasitic upon vertebrates, such as the sheep liver fluke. The "trickery" in question stems from a process--that is, a chemical development--which gives these cercariae the sensation of having already penetrated into the human organism.

As a matter of fact it takes only a minute for the trematode larvae, which grow upon mollusks in fresh water, to penetrate beneath the epidermis as soon as they are in contact with it, during a simple washing of the hands, or at a much greater rate, during a bath.

At the very instant these cercariae make contact with the fatty acids of the skin the penetration phenomenon commences. The envelope of the larvae changes and is no longer "impermeable." This modification makes it possible from then on for the larvae to feed by "osmosis," that is, by penetration into the interior of the human body while resisting the latter's immunological reactions.

No More Toxic Substances

Taking advantage of this phase of the attack upon the human organism, Professor Haas spreads, in the water, hydrocarbons the chemical structure of which at present he alone knows. The larvae thus have the sensation of being in contact with a human and by virtue of this very fact the transformation of their envelopes is provoked.

Thus "duped," the larvae absorb water instead of salts from the human body and die from this "osmotic shock."

Procedures up to now employed in fighting schistosomiasis are based upon the destruction of the mollusks which are "hosts" to these larvae. To

effect such destruction recourse is had to more or less toxic substances which kill considerable numbers of fish, a valuable, and sometimes the sole, source of protein for millions of human beings.

It now remains only for Professor Haas, who works in cooperation with the Institute for Tropical Diseases of Hamburg, to test his own discovery in the field.

FAILURE OF PUBLIC HYGIENE IN CAPITAL ANALYZED

Kinshasa ZAIRE in French No 463, 20 Jun 77 pp 17-21

[Article by Nganzele Mosolo]

[Text] It is said that cleanliness is revolutionary. But the unsanitary condition of Kinshasa is becoming a spreading scourge. Small wonder that various epidemics and communicable diseases there have a fertile field. The unsanitary conditions, let us remark, no longer spare even the public places which are supposed to be carefully maintained in order to serve as examples and encourage the populace to observe the elementary principles of hygiene.

We could want no better example than the Parc de la Revolution, that jewel which, in our opinion--rather than that of those who regard hygiene as a condition of social development--should be cared for "in a revolutionary manner" and serve as a reflection of the city. This park today indeed appears to be one of the most abandoned public places. Where the grass grows as in the jungle. The sanitary facilities there are filthy. When indeed elements of the JMPR [Youth of the Popular Movement of the Revolution] take up headquarters there alongside artists and sculptors and make citizens who go there pay, where therefore to go? So long as there are almost no public sanitary facilities in the city.

The artificial lake which not long since was the pride of the park has been transformed in the course of time into a stagnant pool whose stench assails the nostrils from more than 500 meters, favorable to proliferation of flies, toads, lizards, and mosquitoes, carriers of all kinds of germs and viruses, which there find a consecrated domain. In any event, the very least that can be said for this jewel is that it now serves as a nest for mosquitoes and toads. Again it must be emphasized this is but one case among many which reflect the image of public hygiene in the city of Kinshasa. Has it always been so? The present thrust of our article is devoted to the public hygiene organization in years past, not only to establish a parallel with the present situation but also to disclose certain deficiencies with a view to correcting them as soon as resources permit.

To do this we shall make use of the last report of the Municipal Hygiene Department, which dates back to 1971. At least that is the most recent

report we were able to find at the city hall. Perhaps the responsible officials of this city have been too much preoccupied with lucrative activities to do more of this kind of work.

General Considerations

In connection with the above-cited report we must remember that the public hygiene organization in the city of Kinshasa has not at all times been reliable, considering the demographic explosion and rural exodus. Also, the status of this department, even though it shows at present no substantial regression, is no longer undergoing satisfactory development. Thus, during the 1950 decade--the report states--on the basis of studies and observations effected by responsible officials of Municipal Hygiene, the following findings resulted:

1. The accumulation of concrete and asphalt, of blocks of multiple dwelling buildings and several other types of building have made Kinshasa a pile for accumulating solar heat, which explains the hot climate within the city;

2. The amount of rainfall in 1951 was much lower (11 to 12 percent) in comparison with preceding years; and

3. Tornadoes veer from the city toward the surrounding hills, thus making the city a furnace.

As a consequence of these conclusions which, according to the report, constituted a veritable "SOS" the territorial authorities decided upon energetic measures, having to do, in particular, with zoning, green belts, parks, planting of trees, and protection of the forests adjoining the city. However, all these efforts met with failure. For, from 1960, the public hygiene department "constituted an unfortunate advocate of green zones," in spite of the above-enumerated recommendations. What could be more normal? Was it not the euphoria of independence, instituting the law of the jungle with the anarchy which followed it? Uncontrolled construction and illegal occupancy of land grants and parcels multiplied, with the corollary of degradation of the most elementary conditions of hygiene. Salvation in the first place consisted of restoring discipline to the population and in the second place of reforestation, prohibition of establishing cultivation in forest areas not yet occupied, maintenance of trees in the parks, and institution of a rational housing policy.

Housing Policy

As far as this housing policy is concerned the report proposed advance submission of plans for construction in urbanized regions to the building permit commission in which there should be included a representative of the public hygiene department. While in the so-called "European" communes (Gombe, Limete, and Ngaliema) it was recognized that the urban

standards were still being observed, the findings in the native cities were rather disappointing. The proprietors of land parcels, succumbing to the lure of profits, proliferated small houses to the detriment of the standards.

As a result there were the shrinking of open spaces in the parcels, overpopulation of inhabited and habitable areas, and, in consequence, the consignment of principles of hygiene to oblivion. To these factors must be added the failure to observe standards by certain specialized organizations such as the ONL [National Housing Bureau]. Sanitary facilities consisted notably of cesspools and septic tanks; the operation of the former proved satisfactory and of the latter, tolerable. Four communes were served by a "direct-to-sewer drainage" system designed to evacuate waste matter. During the course of the years this system, now defective or almost so, has become a source of unhealthiness. We have seen the collapse of collectors as a result of erosions. Thus, for example, the sewage and fecal matter coming from Lemba and the Matonge district are simply spilled into the Kalamu and Yolo rivers.

Refuse: A Perpetual Bottleneck

The chapter relating to refuse states that the lack of zone dumps constituted--and still constitutes--a bottleneck, which makes the work of sanitation companies difficult. Refuse was even thrown into areas inaccessible to vehicles. To alleviate this problem it was recommended that sanitation companies place trash cans where needed, while in new zones the public authorities should establish dumps. In the light of all the preceding it is clearly apparent that all conditions had combined to promote the proliferation of communicable diseases and epidemics of all kinds. Since then how has the hygiene service been organized throughout the capital to limit the harm?

Organization of Hygiene in the Zones

The zones were divided into sectors in accordance with their size and area. Such division permitted close inspection of housing, sanitary facilities, removal of refuse, drainage of waste water by sewer systems and gutters, cleanliness of markets, and so forth.

Equipment was made available to the sectors for combating mosquito breeding grounds by spraying fuel oil and oiling stagnant bodies of water. One may no doubt remember those vehicles which filled the streets with fumes of insecticides. But, despite these measures, the report points out that many septic tanks, for example, are improperly used either because of too many users or because of misuse (lack of water, use of inadequate papers and rags, and so forth) or else by lack of maintenance.

In public places (schools, hospitals, camps, and so forth) the situation was rather alarming. Here, in general, the deficiencies were attributed

to insufficiency of equipment and suitable personnel, as well as lack of understanding by the populace of hygienic principles. Also, in most cases the campaign to rid public places, taxis and other transport vehicles, restaurants, bakeries, butcher shops, and other stores of insects proved unfruitful because of a lack of material and equipment. In addition it must be emphasized that the preservation of such materials as vaccines is one of the fundamental difficulties which the public hygiene services experience.

Medical Census

In addition to the general programs the medical census of zones was annual and rigorously pursued. It was aimed in particular at tracking down contagious diseases (sleeping sickness, leprosy, and so forth) and venereal diseases, while vaccination drives were organized regularly. Thus, for example, in the year 1971 alone 24,169 doses of oral antipolio vaccine were given to young children and nearly 25,800 doses of anticholera vaccine to adults of both sexes.

Several other vaccinations were also carried out. Besides, schools being propitious places for transmission of epidemic diseases, the school medical inspectorate was provided in accordance with Public Law No 74/343. This service was subdivided into three major branches, namely, the school medical visitation department, the central dispensary for pupil medical examination, and the dental department. All these branches were coordinated by a medical director of Municipal Hygiene and performed the following functions: The school medical visitation department was responsible for administration of various vaccines, consultations with pupils, and inspection of school buildings. The central dispensary was particularly concerned with treatment of cases of disease found by visiting nurses in the establishments. It thus exercised a dual role--preventive and curative--which consisted, in particular, of separating pupils afflicted with communicable diseases and treating them immediately. To this department it is appropriate to add the prophylactic branch, singularly recognized by its famous designation as the "Burumbu Center" where regular examination of unmarried women for the purpose of detecting venereal and other diseases was mandatory.

In addition to all the above-mentioned services the Municipal Hygiene Department also had a bacteriological analysis branch, whose main function was analysis of the water supply from the Regidoso, swimming pools, beverage dispensaries, untreated water, breweries, and so forth. This service developed a close relation with the chemistry branch, responsible for daily water analysis while another section, entomological, was concerned with larvae breeding grounds.

Public hygiene being a vast field, it certainly cannot be treated exhaustively in this article. But, 17 years after independence, where do we stand? The finding, it is to be surmised, is no less disappointing

than in 1971, as we have already stated. Pretty piles of rubbish still litter the streets, like tin shacks alongside modern buildings, muddy streets multiply at a dizzying rate, and so forth, to cite only examples. How now to explain this stagnation, if not backwardness, in comparison with the evolution to modern times?

There no doubt are the problems of material resources and the unfavorable international economic state of affairs, but also, and above all, a lack of professional conscience. Do we not see agents of the hygiene service accept bribes in the city and say to offenders "mbala ya hsima tokokoma na zone" (meaning "at the next infraction we will take you to the zone office to pay a fine"), or place the seal upon cards without administering vaccine? Simply to make money dishonestly!

We honestly believe this is not an efficacious method. First of all, it is important to educate the masses of the people, by campaigns to make them aware of the most elementary principles of hygiene. As for the present policy of city hall in the matter of public hygiene, it is difficult for us to state with exactitude. Nevertheless, the laconic response we received seems to affirm that public hygiene in the city cannot depend upon city hall, and that the requests for funds made by the municipal hygiene inspectorate to the Health Ministry in order to survive are still gathering dust in a pigeonhole, without result. We still must await the end of an inquiry being made by city hall into public hygiene in order to be enlightened. From it to deduce that the municipal hygiene service is up against lack of resources to provide for salubrity in the capital is but a simple step, which we may humbly take without fear of contradiction. In short--the Health Ministry has a nestegg.

ZAMBIA

ANTIMALARIA CAMPAIGN

Lusaka TIMES OF ZAMBIA in English 29 Aug 77 p 1

[Text] Malaria is endemic in some parts of the Southern Province especially around Nakambala Sugar Estate in Mazabuka, according to a report compiled by the office of the provincial medical officer of health in Livingstone.

Another report said bilharzia was recently endemic in the same province, especially in Siavonga, near Lake Kariba.

The report on communicable diseases said studies carried out in the province had established that groups at risk were infants, toddlers, school children and pregnant mothers.

Groups at Risk

On the basis of Ministry of Health circular of 1974, chloroquine administration at monthly frequencies to groups at risk has been going on.

Rural health centres, clinics and primary schools in indicator areas were centres for such activities, the report said.

The first consignment of chloroquine was received in February and the supply was only 300,000 tablets as against the requisition of 3,000,000.

The implementation of malaria control programme was beset with a number of problems.

These included irregular supply of chloroquine, shortages of assistants for field activities, absence of officials for more than six months to supervise and coordinate malaria activities and limited funds.

Nakambala Sugar Estate, according to the report, deserved special mention. Apart from regular administration of chloroquine tablets to the labour force, insecticide spraying was recommended but the exercise was discontinued later.

"Nakambala and the surrounding areas present a major health hazard as far as malaria is concerned. There is a higher transmission rate in this area than any other. The situation requires the attention of the estate authority," it says.

This year the control programme was to be reactivated with emphasis on regular chemoprophylaxis of the vulnerable groups and adequate coverage of drug administration to populations in priority areas.

ZAMBIA MEDICAL AGREEMENT WITH PRC

Hong Kong AFP in English 2045 GMT 14 Sep 77 OW

[Text] Lusaka, Sept 14--Zambia and China today signed an agreement under which 20 Chinese medical experts will work in Zambian hospitals for two years. Outgoing Chinese ambassador to Zambia, Li Chiang, said that his government had accepted Zambia's request for Chinese medical personnel despite a shortage of doctors in China. Under the agreement Peking will also send drugs and medical equipment to be used by its medical team in hospitals throughout Zambia. Zambian Health Minister Clement Mwananshiku said that the ministry planned to take advantage of Chinese training facilities. "China will supply free drugs, medicines and medical equipment which will be (?used) by the Chinese medical team. Secondly, the Chinese Government will meet all expenses for maintaining the medical team in Zambia," he added.

Lusaka Domestic Service in English 0500 GMT 15 Sep 77 LD/CA

[Excerpts] The government has signed a protocol with the PRC under which that country will provide a team of 20 medical personnel to work in various parts of the country on a 2-year contract. The agreement was signed in Lusaka yesterday by Minister of Health Mr Clement Mwananshiku and the outgoing Chinese ambassador to Zambia, Mr Li Chiang-fen. Under the agreement, China will supply free drugs, medicine and medical equipment which will be used by the Chinese medical team in Zambia. The Chinese Government will also meet all expenses for maintaining the medical team, as the Zambian Government will only meet accommodation and transport expenses. The Chinese team will carry out curative, promotive and preventive medical work by cooperating closely with the Zambian medical personnel.

III. ANIMAL DISEASES

ARGENTINA

MEAT PACKERS PROPOSE MEASURES TO COMBAT FOOT-AND-MOUTH DISEASE

Buenos Aires CLARIN in Spanish 8 Sep 77 p 20

[Text] Deep concern has pervaded the private meat packing industry caused by the measures taken by the chief of veterinary inspection in Holland, who has suspended the issuance of health certificates and prohibited the importation of frozen beef with bones, lamb and pork from any South American country, a prohibition which particularly applies to Argentina.

In a petition submitted to authorities, the meat packing plants are proposing fundamental solutions, necessary to complement the slow process of eradication in zones which have depended on public health services. Referring to this program, the industrial sector suggests that it ought:

1) To put an end to commercial bidding on cattle, which should be invested with the maximum guarantees of quality and efficacy;

2) To establish control of slaughter houses by rejecting animals with foot-and-mouth disease;

3) To limit livestock turnover to the strictly indispensable and improve sanitary inspection of trucks;

4) Not to kill animals with foot-and-mouth disease, as the decomposition of internal organs serves as a prime source of contamination.

Other points, which the meat packing plants indicated in order to put an end to this obstacle to Argentine exports, highlight the fact that the public health services established in meat packing plants (livestock's final destination) prove to be the proper means of control, in order to ascertain, in terms of the origin of diseased animals, the focal point of infection, which should be combated and ultimately eradicated.

AUSTRALIA

BRUCELLOSIS AREAS

Melbourne THE AGE in English 19 Aug 77 p 18

[Text] Victoria's worst area for brucellosis is on the fringe of the Melbourne metropolitan area, where there was a "reactor" incidence of 4.1 per cent in 1976-77.

The same area provides veterinarians with their biggest problems in testing cattle and in policing brucellosis control regulations.

This is because of the many small property owners with part-time cattle enterprises. Generally, their cattle yards are inadequate for blood sampling by vets.

Dr. Dan Flynn, chief of the Department of Agriculture's division of animal health, said fringe area farmers could help the brucellosis eradication programme in three ways:

By co-operating in the compulsory vaccination of all heifers aged between three and eight months. (This is now costing the department about $1 million a year.)

By using tail tags to identify cattle, so that abattoirs monitoring of brucellosis is effective. (47,000 Victorian properties were processed for tail tagging last year.)

By providing cattle yards that allow efficient collection of blood samples.

The district with the least reaction rate to brucellosis in cattle is Victoria's north-east. The incidence there is 1.7 per cent. The south-east (mainly Gippsland) has an incidence of 2.8 per cent, the south-west 2.5 per cent and the north-west 2.2 per cent.

BRAZIL

OUTBREAK OF FOOT-AND-MOUTH DISEASE

Rio de Janeiro JORNAL DO BRASIL in Portuguese 2 Aug 77 p 12

[Text] In order to contain the outbreak of foot-and-mouth disease caused by a new virus that is affecting the herds in the northern portion of Rio de Janeiro State, the purchase, sale, or handling of any kind of beef cattle, as well as holding agricultural-livestock exhibits in Rio de Janeiro State, are prohibited until further notice.

Stressing that foot-and-mouth disease does not contaminate man, the secretary of agriculture, Resende Peres, who announced the above measures yesterday, advised those who do not use pasteurized milk to boil it before using, and recommended that the producers be extra careful with the cattle, so that any possible contamination can be detected in time.

Problem Solved

"The problem has been solved," said Secretary Resende Peres who "during a talk with Minister Alysson Paulinelli was informed that private laboratories are already producing a vaccine against the new virus, in order to revaccinate the cattle." However, he did not report when this revaccination is expected to be done.

He stressed that the domestic market will not be affected, since 75 percent of the meat and milk consumed in Rio de Janeiro come from Minas Gerais and Espirito Santo, in addition to the fact that 80 percent of Brazilian cattle have Zebu blood, which makes the animals much more resistant to foot-and-mouth disease. The problem is with some European cows which, when contaminated can interrupt milk production and can even die.

The concern of technicians of the Executive Group for Combating Foot-and-Mouth Disease (GECOFA) of the Ministry of Agriculture arose when from 10 to 15 new cases per week of the disease were confirmed in the cattle in the northern portion of Rio de Janeiro State, mainly in the municipalities of Macae, Conceicao de Macabu, and Casimiro de Abreu, even after all cattle were vaccinated last June. There were even cattle producers who detected the disease after vaccination.

The situation became more serious when a large increase in illegal transportation of meat from the northern part of Rio de Janeiro State to the market of Greater Rio was confirmed. In spite of the need to present a GECOFA certificate, deficient inspection does not allow containment of illegal transportation. According to the Campos Agricultural and Livestock District, the amount of meat transported to Greater Rio is "infinitely greater" than the official figures reveal.

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 5 Aug 77 p 26

[Excerpts] Close to 300 animals shown at an exhibit of milk and table cattle which closed on Sunday at Braganca Paulista, have been in quarantine since Monday because they have foot-and-mouth disease. The animals are at the Posto de Monta, the place where the exhibit was held, and their owners believe that they will suffer great losses because almost all the animals are of pure stock.

According to the ranchers, all the beef cattle have been vaccinated against the disease, in line with the ruling of the Ministry of Agriculture.

What is happening, therefore, is that the animals were immunized against virus A-Cruzeiro and according to the analyses made by the Biological Institute of Sao Paulo made public yesterday in Braganca, the agent which caused the foot-and-mouth disease in this case was virus of the type A-Wenceslau. In Brazil, virus of the types A, O, and C are known to cause foot-and-mouth disease, and each one of them may present various contagious varieties. The type of vaccine to be applied to the cattle is determined by the geographic area and defined by the Ministry of Agriculture, which exempts from any blame the laboratories that manufactured the vaccine used in the Braganca region. This is so because in that area the ministry had determined immunization against A-Cruzeiro virus.

The chairman of the Dairy Cooperative of Braganca Paulista, Joao Gilberto Rossi, said that "now that the type of virus is known it becomes necessary for the federal government to immediately authorize an all-inclusive vaccination covering an area approximately 10 km in radius, reaching especially the locations of ranches of the 53 exhibitors whose animals have been affected by the A-Wenceslau virus."

As soon as the disease was detected, the animals that participated in the exhibit were isolated and received injections of gamma globulin and proteid serum, to increase their resistance. Until yesterday no animals have died, but the ranchers are worried because of the possibility that the disease may spread. The milk herds of the region, which produces close to 140,000 liters of milk per day, is estimated at 5,000 head, and the ranchers are protecting their animals as best they can. Miguel Modolim of Atibaia, placed a sign at the entrance to his ranch saying: "Entry forbidden. Precaution against foot-and-mouth disease." Jorge Rocha Camargo, from Braganca Paulista, installed at the entrance to his ranch a kind of tank containing a chemical preparation which serves to "sterilize" the vehicles entering the property.

Rio de Janeiro JORNAL DO BRASIL in Portuguese 10 Aug 77 p 13

[Text] Yesterday, distribution was started of the first 30,000 doses of monovalent vaccine A for immediate use on the herds of cattle at stationary positions of the Executive Group for Combating Foot-and-Mouth Disease [GECOFA] in the northern Rio de Janeiro area. Every 2 weeks the Pan-American Foot-and-Mouth Disease Center will prepare more than 30,000 doses, the maximum capacity of its vats for the finished product.

Today the remainder of the first output, in doses of 5,000 to 6,000 for each transporting vehicle, will be sent to posts in Friburgo, Cordeiro (seat of the area that goes from Trajano de Morais to Santa Maria Madalena) and Bom Jardim. According to GECOFA, the inoculation will be done "from outside to inside of the eruption." According to the outcome, private laboratories will not be used for more vaccines.

Rio de Janeiro JORNAL DO BRASIL in Portuguese 13 Aug 77 p 18

[Text] The government of Israel has temporarily canceled its imports of Brazilian beef, mainly edible viscera, in the face of news of the spread of foot-and-mouth disease in the domestic herds of beef cattle. The news was confirmed by the management of T. Maia and Swift-Armour cold storage plants, two of the three businesses which have had their shipments to Israel stopped.

The managers of the cold storage plants explained that the prohibition on imports to Israel was prompted by an Israeli veterinarian headquartered in Buenos Aires, who was "completely unaware of the prompt action by the Brazilian Government in the control of foot-and-mouth disease and alien to the strict supervision of export products by DIPOA [Department for the Inspection of Products of Animal Origin]."

Clarification

The Israeli Government decision was referred to Itamaraty for evaluation. The latter had already mobilized diplomats abroad for clarification of the actual situation on the outbreak of the disease, which was concentrated at the time in the region of Macae, State of Rio.

For more than a month, 18 tons of edible viscera purchased by Israeli firms have been stored in the T. Maia storage plant in Rio, awaiting authorization for shipment. Swift-Armour also has 60 tons of edible viscera on hand, which has been purchased by Israeli importers.

Sao Paulo FOLHA DE SAO PAULO in Portuguese 23 Aug 77 p 20

[Text] Presidente Prudente--After an official visit to a cold storage plant in Presidente Prudente, the director of the DIPOA [Department for the Inspection of Products of Animal Origin], Lucio Tavares Macedo, said yesterday that Brazil is winning new markets in Africa and Asia and that the European countries are no longer the main importers of Brazilian meat.

On the subject of foot-and-mouth disease, he noted that there are restrictions imposed by the health authorities in the importer countries. In his view, this disease constitutes one of the most important and difficult problems of our national livestock sector. "But the government is undertaking a very great effort, along with private enterprise, in an attempt to control this disease, because it is very difficult and, for the time being, practically impossible, to eradicate it."

Tavares Macedo explained that animals destined for slaughter are only accepted at the slaughterhouse when accompanied by a health certificate and a certificate of vaccination against foot-and-mouth disease.

Rio de Janeiro JORNAL DO BRASIL in Portuguese 23 Aug 77 p 12

[Text] The secretary of agriculture, Jose Resende Peres, stated yesterday that the outbreak of foot-and-mouth disease which occurred in the Rio de Janeiro municipalities of Macacu, Macae and Casemiro de Abreu had been brought under control. He added that 30,000 head of cattle have already been vaccinated. The cattle herd of the three municipalities is estimated at 130,000 head, all of which will be vaccinated by the end of the year. Vaccine is administered three times a year.

Mr Jose Resende Peres said that for the past 2 weeks, not a single case of foot-and-mouth disease has been recorded in the entire state of Rio de Janeiro.

Paris AFP in Spanish 1652 GMT 15 Sep 77 PY

[Text] Rio de Janeiro, 15 Sep--It was reported here today that the Netherlands Government has prohibited the imports of beef, pork and mutton from Argentina, Brazil and Uruguay.

The report was made by Jean Louis Chapele, director of the Kaiowa cold storage house and the biggest Brazilian meat exporter to the Netherlands.

Chapele said that the decision was made because of reports on an increase of foot-and-mouth disease in the South American herds.

According to the Foreign Trade Department [CACEX] of the Bank of Brazil, Brazilian meat exports to the Netherlands from January to June 1977 totaled $1,824,615.

According to CACEX, the Netherlands market is the third biggest importer of Brazilian meat.

Sao Paulo FOLHA DE SAO PAULO in Portuguese 14 Sep 77 p 20

[Text] Manaus--A herd of 550 steers valued at 20 million cruzeiros, which was purchased in the state of Goias, is being decimated by foot-and-mouth disease in the stockyards of the Manaus Meatpacking Company Inc [FRIGOMASA], where over 200 head of cattle have already died and had to be cremated; while the Ministry of Agriculture's federal inspection, prompted by the animal production executive group, has been probing the origin of the disease and drawing upon all resources to save the remaining animals.

The directing president of FRIGOMASA, Alberto Carvalho Pimenta, stated that the cattle had been purchased from several Goias suppliers to meet the demand from the Manaus population. The herd was shipped to the port of Belem by highway transportation, and from there was taken to Manaus,

where it arrived Saturday afternoon, with about 100 head of cattle dead and the rest of the herd sick. The trip took 9 days.

CUBA

CUBAN REVIEW OF HYGIENE AND EPIDEMIOLOGY

Havana REVISTA CUBANA DE HIGIENE Y EPIDEMIOLOGIA in Spanish Jan-Apr 77 p 24

[English summary furnished by source]

[Excerpt] Cespedes, C. M. et al., "Rabies in the Mongoose (herpestes auropunctatus auropunctatus)," REV CUB HIG EPID 15: 1, 1977

An analysis of the incidence of rabies in the mongoose in Cuba is made, and the animal's history is briefly reviewed. An increased incidence of rabies in this viverrine mammal between 1961 and 1972 was found; a 60-75 percent positivity rate was confirmed. The frequency of positive diagnoses is stressed. Rabies is enzootic among the Cuban mongooses so a constant surveillance at the mongoose eradication plans is recommended.

GABON

CANINE RABIES CASE REPORTED

Libreville L'UNION in French 11 Jul 77 p 3

[Article by Obame Mbeng]

[Text] The commune district of Oyen was declared a rabies-infected area: A 4-month-old dog kept by Mr Jean Claude Porte Vannier at Oyen died at its residence on Tuesday, 22 June 1977, of symptoms seeming to indicate rabies. Called upon to examine brain specimens of the dog suspected of this disease, the Paris Pasteur Institute asserted that it had indeed been a victim of rabies.

Consequently, the competent local authorities have taken drastic measures required to insure the safety of the population of the area which was decreed as under suspicion. All the stray dogs are killed and buried. Wild and tame animals, particularly the monkeys, have been quarantined at their owners until they receive their antirabies shot. Meanwhile the persons coming into direct contact with suspicious dogs are requested to have themselves vaccinated at the Department for Endemic Diseases at Oyen.

INDIA

DISEASE HITS GOATS

Madras THE HINDU in English 31 Aug 77 p 10

[Text] Villupuram, Aug 30--Due to vekkai disease, 970 goats died in Tindivanam taluk. The Regional Assistant Director of Veterinary, Cuddalore and his staff rushed to the affected villages and took precautionary measures to arrest the spread of the disease.

NEW ZEALAND

IMPORTATION OF HORSES SUSPENDED

Christchurch THE PRESS in English 26 Aug 77 p 1

[Text] New Zealand has suspended the importation of horses from Britain and Ireland after an outbreak of contagious equine metritis in both countries.

The disease is a venereal condition.

The decision by the Ministry of Agriculture to suspend import permits results from a recommendation from a meeting of veterinarians, horse breeders, and bloodstock agents.

Australia has already suspended imports from both Britain and Ireland, and has sent a team of veterinarians there to investigate the disease. The Director of the Ministry's Animal Health Division (Dr G. H. Adlam) said the suspension of permits would be reassessed in the light of what the Australian team found.

An air shipment of cattle and horses due in New Zealand on September 12 would not be affected by the restrictions, he said.

Mr N. G. Wigley, proprietor of the Inglewood Stud, Kaiapoi, said last evening that the ban would not apply to the stud's new sire, King's Palace, which would be on the September 12 air-lift.

PERU

INCIDENCE OF FOOT-AND-MOUTH DISEASE DECREASES

Lima LA PRENSA in Spanish 12 Jul 77 p 3

[Article by Cesar Alvarado S.]

[Text] The incidence of foot-and-mouth disease in Peru has been reduced to 2 percent from the 1974 rate of 15 percent affected of the total bovine population. This success has been obtained even before the conclusion of the first stage of the national campaign against the disease which is to be completed during December 1977.

This important program is conducted by the Food Ministry thanks to a loan of $6 million from the Inter-American Development Bank, with matching funds from the public treasury.

At present Peru's bovine population reaches 4,059,000 head, mostly concentrated in Arequipa, Piura, Cajamarca, Junin and some forest areas.

Initially the program in question was under the Agriculture Ministry; in 1975 it was placed under the Food Ministry and its three regional offices.

The national campaign against the disease has been implemented perfectly and consists of vaccination, detection and control teams and a motor pool for field work. Also two quarantine stations have been built, one in Lima and the other in Arequipa.

PORTUGAL

INCREASED INCIDENCE OF SWINE DISEASE REPORTED

Lisbon DIARIO DE NOTICIAS in Portuguese 27 Aug 77 p 3

[Text] In view of the serious growth of the African swine disease, steps have been taken to control the movement of hogs without proper authorization, according to an official note of the Ministry of Agriculture and Fishery (MAP). The official note of the MAP reads as follows:

"The epizootic African swine disease is currently in a phase of serious intensification which makes necessary the adoption of emergency sanitary measures to protect the national livestock resources.

"Steps have been taken to control the movement of hogs, which under the terms of the sanitary legislation in force can proceed only under sanction

of transit permits issued by the regional sanitary and veterinary authorities. Furthermore, under a January directive of the secretary of state for agrarian structuring, the regional agrarian reform centers will also control the movement of live cattle destined for slaughter or sale, such transfers being subject to approval.

"The General Office of Livestock Raising Services, the General Office of Economic Supervision and the National Republican Guard (GNR) are intensifying the control of the movement of hogs throughout the country.

"Violators will be penalized under the provisions of Law-Decree No 39209 of 14 May 1953 with fines which could go as high as 150,000 escudos."

Greater Incidence in the South

In the meantime, according to the Portuguese News Agency (ANOP), the current outbreak of African swine disease presents a greater incidence south of the Tagus River and, more specifically, in the area of the Livestock Raising Headquarters of Setubal.

The heat and the lack of rain are pointed out by the technicians of the General Office of Livestock Raising Services as the main causes of the increase of swine disease, which is considered unusual in contrast with the number of cases detected in recent years.

It is a disease which has been affecting the raising of hogs for about 20 years and against which there is no vaccine available at this time.

The outbreak occurring at this time, which is creating serious concern throughout the country, has altered the evident downturn in the cases of the disease detected in the last 3 years.

Meanwhile, the teams of the General Office of Economic Supervision will intensify the control of the movement and slaughter of hogs, while the General Office of Livestock Raising Services has alerted the people to contact the regional branches of that office as soon as they discover cases of animals infected by the African disease.

SENEGAL

RABIES IN OUSSOUYE

Dakar LE SOLEIL in French 18 Aug 77 p 1

[Text] In Oussouye, rabies has become the great nightmare of a population that is more and more being taken over by the dogs. On 11 August 1977, 43 cases of bites were recorded, as reported by the deputy prefect to the

minister of health who was visiting the region. To obtain a full appreciation of the extent of the disease, one must remember that Oussouye is a very small town. The department alone uses 1,000 doses of antirabies vaccine. "Cassa" has many dogs and the chief doctor of the department has ordered their systematic killing. The population is opposed to this principally for sentimental reasons. What then? If the owner could be forced to care for the possible victims of his dog, the authorities would be conciliatory. The authorities are attempting to convince the population to have their domestic animals vaccinated. In any event, an indoctrination campaign seems necessary, so long as in the countryside a dog bite continues to be a trivial accident, often neglected.

SPAIN

SWINE DISEASE IN LOGRONO

Madrid YA in Spanish 17 Aug 77 p 4

[Text] Purely as a precaution, another 1,265 swine have been sacrificed in Logrono. Although it appears that fear of possible contagion of swine disease among the remaining hogs in the Banos de Rio Tobia area of La Rioja, 20 meters from the spot where the disease broke out, have dissipated completely, another 1,200 hogs have been sacrificed as a precaution, since among them were 20 from the farm where the disease did its damage.

Also, 22 hogs in a nearby farm have been killed, likewise as a precaution. The work of inspection and prevention by the Ministry of Agriculture, Veterinary Department, has been prompt, and from what is gathered about its disappearance, there are no indications that it will again propagate.

Nevertheless, it is too early to speak of a complete restoration of normalcy on the Banos de Rio Tobia farm because it is necessary to wait 10 days to be completely certain of the disappearance of the disease, which has cost some 2,800 hogs.

Insufficient Subsidies

The subsidies that the owners of the sacrificed animals will receive are 80 percent of the value of the meat, and although this subsidy may be considered relatively adequate for fattened hogs, it is not for sows, whose value is very much higher than that for meat.

Also, in another section of Clavijo, in La Rioja, 150 hogs have been sacrificed, some of which also came from the Banos de Rio Tobia farm, where the disease broke out. The procedure for burying the affected animals is a common grave so that the disease can be eradicated. A large amount of lime is poured in, so as to avoid contagion, and it is covered with dirt.

Unfortunately this procedure is very seldom used because it implies an admission by the owner of the existence of the disease. Most of the time they prefer to keep silent because, as the disease is not harmful to humans, it is more profitable to sell the infected animals at the market price of meat than to receive subsidies, which at present are a good deal below those prices.

Madrid YA in Spanish 19 Aug 77 p 19

[Text] There is no cause for alarm regarding the outbreak of swine disease in the La Rioja area known as Banos de Rio Tobia, and its incidence has not passed beyond the normal limits usual in these cases, according to statements made to CIFRA by the Ministry of Agriculture.

The outbreak belongs to the category of sporadic eruptions that are caused by diverse circumstances in various areas and at different times of the year, according to the ministry, and the appearance of swine disease in the aforementioned Logrono area does not mean a special occurrence.

The indemnities set for these cases are a subsidy of 80 percent of the value of the meat of the animals sacrificed, an acceptable figure for fattened hogs but which the cattlemen consider low for breeding stock.

The Indemnities Are Not Enough, According to the Bank of Bilbao

The swine disease constitutes a scourge for our livestock industry. In the rural Huelva mountain area, throughout all of Estremadura, and now in various counties of the north--Rioja among them--outbreaks occur causing serious failures. Nor can the indemnities--which in the first quarter reached 326.3 million pesetas--mitigate the ruin threatening thousands of cattlemen, the great majority of whom have scant resources, says the bulletin EL CAMPO of the Bank of Bilbao.

The virus is spreading; the disorganization among the cattle and the resistance of the farmer to report cases of the disease because the amount of the indemnization does not cover the possible losses make the disease less controllable. Thus, adequate vigilance, especially in the communal operations, and better handling of manures and troughs would contribute to eradicating the disease, which is lasting too long.

TANZANIA

ANTIRABIES CAMPAIGN

Dar es Salaam UHURU in Swahili 23 Aug 77 p 4

[Text] A total of 5,509,700 shillings has been provided by the government to implement an antirabies campaign in Iringa Region. This campaign began in June this year in the region after deaths caused by this disease occurred in Singida, Shinyanga and Tabora regions. Iringa Region has 300,000 dogs, which is approximately the number of inhabitants of Njombe District. Since the campaign began, 945 dogs have been given antirabies shots and 536 stray dogs have been killed. The implementers of this campaign have recommended that other animals such as hyenas, jackals and wild dogs be hunted and killed if they live in areas near villages or cities. The rabies situation is not bad in Iringa Region although there were a few incidences of the disease earlier.

TURKEY

RABIES NOTED AMONG ANIMALS IN TOKAT PROVINCE

Istanbul HURRIYET in Turkish 23 Aug 77 p 7

[Text] Kinikkoy is a developed, quite literate village in the Almus District of Tokat. In spite of that, religious fanatics in our village are gambling with the health of the people. I am writing about something that is happening throughout our area, something that the state has shown no concern whatsoever about. The incident is this:

For some time, rabies has been occurring in and around our village. Animals bitten by rabid dogs become infected and die. Seven animals are known to have died recently as the result of being bitten by stray dogs infected with rabies. The situation has been reported to the district, but not one animal has been vaccinated. The people of our area are backward. They are ignorant. They think the mystics can protect them from rabies. They think chants and spells will get rid of rabies. A group of men come from the village of Erbaa'nin Kececi, including the village head man, and perform spells over the animals, then sprinkle them with muddy water.

The educated youth of Kinikkoy say that anyone who has been in contact with rabies should be vaccinated, but no one is doing anything about this. They are relying on the spells.

However, the district veterinarian has been informed of the matter and ought to be involving himself. Every person and animal in the village

ought to be vaccinated. The major reason that the people of the village have not been vaccinated is fear of the needle.

State health officials ought to be seriously concerned with the rabies epidemic in our area, the animals that have died of rabies ought to be burned, and vaccination of animals ought to be compulsory. We are waiting for the officials in Tokat and Almus to take care of this important matter. Otherwise, our village will be wiped out, man and beast.

UGANDA

RABID DOGS, JACKALS

Kampala VOICE OF UGANDA in English 15 Aug 77 p 3

[Excerpt] East Ankole--The District Veterinary Officer, East Ankole, Mr Habyalimaana has disclosed that many dogs and wild jackals in Rwampara County were affected with rabies.

He therefore informs the public that vaccination against rabies to all dogs in Rwampara County starts on the 17th August this year starting with Bugamba Sub-County.

On the 18th the vaccinating team will be in Ndaija Sub-County and on the 19th in Rugando.

Vaccination will take place on the days mentioned at the respective centres of the sub-counties.

URUGUAY

OFFICIALS FINALIZE ANIMAL DISEASE CONTROL AGREEMENT WITH BRAZIL

Montevideo EL PAIS in Spanish 2 Sep 77 p 23

[Article by Martin Correa]

[Text] Livramento--A sanitary agreement was drawn up between Brazil and Uruguay which establishes the basis for the development of a program in that connection on the border areas of both countries. The corresponding agreement will be subscribed by an exchange of notes between representatives of the ministries of foreign affairs of both countries. The sessions, which are being held at the Commercial Club of Livramento, will come to an end tomorrow. They are being presided over by Dr Jose Pedro Gonzalez, director of animal production of the Brazilian Ministry of Agriculture.

The Uruguayan delegation is headed by Dr Luis P. Barzabal, general director of the Veterinary Services of MAP [Ministry of Agriculture and Cattle Raising]. The technicians made significant statements to EL PAIS.

During a halt in the activity, Drs Artigas Figares, Jose Pedro Gonzalez, Pedro Barzabal and Bernabe Bentancur graciously explained matters at the request of EL PAIS. First of all were those expressed by Dr Jose Pedro Gonzalez.

After greeting his Uruguayan colleagues, he said: "We are here, in Livramento, pursuant to the intent of the protocol recently subscribed by the presidents of Brazil and of Uruguay calling for the signing of an agreement, a formalization--inasmuch as there already is basic agreement between the two countries--which will precisely address the problems of cattle raising, extremely important for the two countries. The problem of animal health has particularly interfered with our cattle raising," he pointed out. "We believe that after 3 days of discussion between technicians of both countries, we will come up with very valuable decisions. It is necessary that both countries adopt identical measures in animal health," he stated, "seeing that they have dry borders. It is necessary that foot-and-mouth disease and other illnesses which interfere with the marketing of our meats," he added, "be decisively brought under control, because we need to sell our meat. With the adoption of effective measures by both countries, we have the absolute guarantee that foot-and-mouth disease, brucellosis and other illnesses which impair the production of our herds will be, if not eliminated, at least brought under control within a short time."

Statements of Dr Barzabal

For his part, Dr Pedro Barzabal told EL PAIS: "We attach enormous importance to what is being done in Santa Ana do Livramento at this time. We feel right at home with the Brazilians in the sense that the traditional ties of friendship and fraternity allow us to obtain the best results in such a specific field as ours. We believe that it is very important for Uruguay--having a neighbor with a dry border like Brazil--that it come to terms in this fight against the diseases of cattle. That, we believe, added to what can be achieved at present with the cooperation of our northern brethren, will provide a better animal production for both countries."

Dr Artigas Figares

For his part, Dr Artigas Figares said that these sessions have turned out to be the culmination of thorough studies begun almost 2 years ago. What will be accomplished is the definitive formulation of the agreement which will be subsequently signed by the livestock ministers of both our countries.

Important Views

Dr Recaredo Ugarte made the following statements to EL PAIS:

To those of us who have been working since the start of this project, the happiest moments of this first stage are those spent with Dr Figares to date. We have been working with colleagues of the federative republic of Brazil since 1975, outlining and planning interests and concepts emanating from the directorates of each one of the sanitary departments of the ministries of agriculture of Brazil and of Uruguay. The Mixed International Commission in charge of directing this agreement at the border level has been set up as the first step. Following that phase, a study of the details of the draft agreement was begun in order to obtain a greater practical application at the level of the fields of action.

Subsequent to its approval, structuring and sanctioning of the working project of the Mixed International Commission was begun, a project in which we had the opportunity to prepare the sessions mentioned at the start of this talk, jointly with Dr Figares, and Drs Waldemar da Fontes and Lisboa of Brazil. After the approval of the formulation of the working regulations, the mixed commission went to work and designated the executive subcommission of the agreement, which is in charge of implementing the directives of the former and, through the work group appointed by them, establish the practical bases for application in the various fields covered by it, which for the sake of an illustration can be listed as brucellosis and tuberculosis, foot-and-mouth disease, parasitosis caused by ticks, rabies, hydatidosis and those related to the sanitary aspects of the measures concerning the movement of animals of both countries.

The other important aspect was the specific designation by the mixed commission of the persons in charge of incorporating the executive subcommissions and, in the final instance, of relegating to those executive subcommissions the approval of their own regulation to allow them to establish the basis of their operation with more freedom and on a smaller scale.

Finally, as a significant aspiration of the groups sponsoring this meeting, it was proposed that the mixed commission investigate the possibility of having a representative of the Pan-American Health Organization (PAHO) also form part of this executive subcommission for the purpose of performing a number of important functions, of which I will take the liberty of mentioning two: On the one hand, that of providing all the essentials, in terms of materials or of instruction, which his office possesses on the various subjects in order to facilitate the task of this subcommission. And on the other, no less importantly, that of acting as moderator, as adviser, on the various problems which must be solved.

In broad terms, those were the matters discussed in the session on Wednesday.

4,000 DOSES OF BRUCELLOSIS VACCINE SHIPPED TO AFFECTED AREA

Caracas EL UNIVERSAL in Spanish 17 Jul 77 p 14

[Text] Valera, 16 Jul--After a series of petitions to the competent authorities, 4,000 doses of brucellosis vaccine were obtained for the state of Trujillo to be administered soon to the cattle of the region.

The information was provided by Dr Luis Alfredo Valero, president of the College of Veterinary Doctors, who added that this acquisition will help to solve, in part, a serious problem confronting stock growers of the state of Trujillo.

The source stated that stock growers who are interested in acquiring the respective doses should ask for it from veterinarians who will advise in administering it.

Dr Valero said that probably in the course of the next month more supplies should arrive which would be sufficient to provide a total of 10,000 doses of vaccine.

The acquisition of these 4,000 doses of vaccine against brucellosis will ease worries in the state of Trujillo that livestock are in serious danger from all points of view, even to the point where some deaths had been recorded.

OUTBREAK OF BOVINE LEUCOSIS

Caracas EL NACIONAL in Spanish 31 Jul 77 p D8

[Excerpts] Bovine leucosis is spreading to various regions of the country with serious effects on domestic livestock. This was revealed yesterday in a report of the Pro Venezuela Association.

According to information from the Ministry of Agriculture and Livestock, bovine leucosis has been detected in the states of Lara, Anzoategui, Falcon, Miranda, Guarico, Merida, Zulia, Carabobo, Portuguesa, Aragua and Sucre. In other words, a large part of the cattle region which produces the country's milk is affected by the disease. According to technical reports and experts this disease not only attacks selective breeds of dairy cattle such as the holstein and brown Swiss, but there have also been cases detected in the Cebu and even in native breeds as in the case involving the "El Limon" cattle ranch.

The Ministry of Agriculture and Livestock, in the interest of solving the problem, has been studying and promoting important national and

international events, and finally on 22 September 1976 a resolution published in the Official Gazette No 31,074 of that same date resolved among other things that the infected animals would be killed in slaughterhouses to be selected by the ministry.

In attempting to bring about an increase in the production of milk and meat the national government developed a policy of importing breed stock which mostly entered the country, supposedly without the necessary controls to certify the stock free of leucosis in the country of origin. If this is the case, it is feasible that we might increase the percentage of disease as the new stock increases, and in a reverse situation, the new stock which might be free of disease could be contaminated by sick domestic stock.

We should say that according to information received, cattle shipments from the United States and Canada have been examined in Venezuela and these examinations have proved positive, however, many countries do not certify that their cattle exports are unaffected by leucosis. Under these circumstances we should ask ourselves if it is right to liquidate part of our country's infected stock in order to replace it by other herds which are not guaranteed to be free of contamination.

As a result of an April 1977 symposium, it is necessary to update all international information in order to see what measures other nations have taken. It appears that in the United States, health controls have not been established in the face of widespread existence of disease among cattle because trade is allowed domestically as well as internationally.

The interests of the domestic producer require a clarification of the policy of action in the matter. The country's interests involve a situation where a policy pertaining to practical nutrition should not bring about actions which would nullify the great efforts the public sector has accomplished in this field. Therefore, we believe it necessary that a group at the scientific, technical and producing levels coordinate a joint effort to find a definitive solution to the problem.

It is impossible for a producer to maintain a static economic process. A dairy farm, with a high percentage of stock affected by leucosis, is subject by law to shutdowns which, in a short time, would make production unprofitable because it would not be able to sell stock or import new breed stock while the herd is designated as diseased. If, on the other hand, the procedure of slaughtering diseased herds is followed there will be an immediate and obvious shortfall in meat as well as in milk. Replacing these herds which are already acclimatized to the country with other stock will be difficult.

We believe, on the other hand, that what is important in the case of slaughtering for health reasons is not economic indemnification, but that an effort be made toward specie indemnification. In other words an effort

should be made to obtain stock with productive characteristics similar to the ones which will be destroyed in order to hinder a reduction of milk or meat production, bearing in mind beforehand the difficulties we face in finding similar substitutes.

Another factor which should be a subject of study and analysis is determining any possible consequences consumers might suffer, a subject which should take precedence over economic considerations.

Caracas EL NACIONAL in Spanish 5 Aug 77 p C6

[Excerpts] Barquisimeto, 4 Aug--The College of Veterinarian Doctors of the Federal District is sponsoring a meeting with representatives of various organizations in order to study the problem of bovine leucosis which is affecting various stock growing regions of the country and request that an official general appraisal be made.

For this reason and in view of the seriousness of bovine leucosis which is affecting dairy stock, in particular, in the states of Lara, Anzoategui, Falcon, Miranda, Guarico, Merida, Zulia, Carabobo, Portuguesa, Aragua and Sucre, the College of Veterinary Doctors of the Federal District is calling a meeting to take place this month. The meeting will include representatives of Pro Venezuela, the veterinary faculties of the Universities of Zulia, Lara and the Central University of Venezuela, the Federation of Cattle Growers, the Ministry of Agriculture and Livestock, the Center of Veterinary Studies and the Department of Animal Health. They will meet in order to form a mixed commission to review material on progress and problems of bovine leucosis in the country's livestock and to support standards in the matter, said Dr Julio Manuel Montoya.

He added that the seriousness of the situation lies in the fact that in spite of bovine leucosis extending to practically all the livestock growing areas of the country, the Ministry of Agriculture and Livestock, the responsible agency, has still not produced a general diagnosis of the problem and the real nature of the illness which is affecting the dairy industry.

VIETNAM

LIVESTOCK EPIDEMICS

Hanoi Domestic Service in Vietnamese 0400 GMT 4 Sep 77 BK

[Excerpt] In August, cattle epidemics became somewhat more widespread than in the previous month; swine cholera sporadically broke out in Phu Khanh, Ha Bac, Thanh Hoa and Ha Son Binh provinces and was actively

controlled by the localities concerned. Swine pasteurellosis was reported in Song Be, Quang Nam-Danang and Phu Khanh provinces, which managed to contain and stamp out the epidemic thanks to the availability of anti-epizootic vaccinations. Anthrax broke out in Ha Tuyen, Son La and Lai Chau provinces but was promptly contained and eradicated.

The localities have given and are continuously giving anti-epizootic injections to protect the cattle during the fall crop season. To date more than 15,000 liters of vaccine of various types and 90 doses of medicine for swine cholera and duck cholera have been distributed to 23 provinces.

IV. PLANT DISEASES AND INSECT PESTS

AUSTRALIA

DANGER FROM PLANT INSECTS AND DISEASES

Canberra THE AUSTRALIAN in English 13-14 Aug 77 p 5

[Article by Jim Jenkins]

[Text] What do golden nematode, cabbage looper, verticillium wilt, greasy blotch, New Zealand grass grub, seed corn maggot, pine bark borer, Japanese beetle and Colorado potato beetles have in common?

They are some of the hordes of plant insects and diseases which agricultural scientists fear could invade Australia and play havoc with our $7,000 million-a-year primary industry.

The pastoral industry has recently been devastated by the introduction of four new pests, the most ominous being the spotted alfalfa aphid, which took only six weeks to spread from Queensland to South Australia.

A new species of fruit fly, the oriental fruit fly, has been found in the far north and there is every chance it will become established in orchards all over Australia.

Other recent invaders are the giant African snail and the elm bark beetle.

Australia's vulnerability to foreign insect invasion is dramatically shown. Scientists believe a solitary female spotted alfalfa aphid carried on a plane could have established the original colony here.

And if insects continue to slip past quarantine, so too can exotic diseases.

The Victorian Farmers Union is the latest rural group calling for tougher quarantine inspections and regulations.

It is concerned that about four million cut flowers worth $500,000 are imported each year from more than 20 different countries and subject to only a cursory examination before being dispatched all over the country.

A report prepared for the VFU by one of its members states that not enough is known about the pests and diseases that are present in the flower-exporting country.

It says these pests may appear harmless in their original environment, but transferred to a different environment and new and more susceptible hosts, they could run riot.

The VFU report concludes: "Primary industry is vital to Australia and the diseases and pests that will arrive here through the import of cut flowers are a threat to primary industry.

"It is a matter of national importance that the import of cut flowers be subjected to the existing stringent fumigation and inspection procedures that apply to all other plant material, or their import be immediately terminated."

APHID WAR IMPRACTICABLE

Canberra THE AUSTRALIAN in English 19 Aug 77 p 4

[Text] Eradication of spotted alfalfa aphids in Australia was not practical because they were too widespread, the Minister for Science, Senator Webster, told Senator Harold Green (Lib, SA). He warned the aphids were expected to spread throughout Australia very quickly and "losses in terms of production, including livestock through destruction of pasture, will be hundreds of millions of dollars."

BOTSWANA

ERADICATION OF TSETSE FLY ATTEMPTED

Johannesburg WEEKEND WORLD in English 18 Sep 77 p C4

[Text] Almost every evening for the past few weeks aircraft have been lifting off a northern Botswana airfield for an airborne attack which is already triggering widespread international protest.

The nightly bombing raids have been against a stronghold of one of Africa's major scourge--the tsetse flies infesting the great inland delta called the Okavango Swamps.

The hope is to totally wipe out the flies, carriers of sleeping sickness in man and Nagana disease in cattle.

International critics of the operation are most concerned about the Okavango Swamps as one of Africa's, and the world's, last great haven of wild life.

An enormous and ecologically self-sustaining zone containing an unmatched variety from fish, teeming bird life, elephants, buffaloes and an extraordinary range of antelope including such rare species as the Ltchwe and Sitatunga.

The aerial attack on the tsetse is by spraying a poison named Endosulphan. This, critics say, will be ingested by many creatures with crippling side effects.

Ultimately, they say, Endosulphan can kill off, starve out or otherwise destroy many kinds of wild life and permanently upset the balance of nature.

"Because of the concern that we might be polluting the atmosphere and causing damage to other species," explained one senior veterinary official, "we have had people from the centre for Overseas Pest Research in Britain working here for almost two years."

The men from OPR, a part of Britain's Ministry for Overseas Development, were asked by Botswana to do completely independent checks on whether the spraying would poison fish, birds or animals.

So far the sample tests on wildlife have produced no evidence of harm.

If the current tests show that total tsetse eradication is in fact possible, then the question of the Okavango Swamps' future enters another dimension.

The Botswana Government and all its involved ministries must decide what to do with a tsetse-free delta--and if they want to pay the cost of making it that way: at least R3-million, probably much more. Should they throw it open to all or preserve intact a gem of nature at its untouched best?

Johannesburg THE WORLD in English 19 Sep 77 pp 2, 3

[Text] Botswana's tsetse fly control unit is aiming for total eradication from a trial aerial-spray area of the Okavango delta. If successful, the complete spraying of the swamps will be possible putting Africa's so-called last frontier at the mercy of progress and development.

Maun--At six pm, as the fierce Botswana sun loses its fiery glow and turns to orange, a lone aircraft rises heavily from the gravel airstrip here in the direction of the Okavango Swamps.

Fifty kilometres away, Dr Jeffrey Bowles listens for the familiar drone of the aircraft's twin engines above the grunt and roar of lion, the weird and uncanny "laughter" of the hyena.

Dr Bowles, sometimes accompanied by his wife Judy, is preparing for a long night in the bush. The crew of the aircraft have already readied themselves for a hazardous concentration-gripped night of flying just 15 metres above the treetops and swamp, knowing that one lapse will cost them their lives.

Sweep

"Bravo, one, we're six miles from you," chief pilot Maurice Kilborn's voice crackles over the radio.

"Golf, one, we hear you approaching," Dr Bowles replies and for another night "Operation Tsetse" has swung into action.

For two months this spring the Cessna 310 will sweep back and forth across a 60 by 80 kilometre "block" of swamp and mopane forest spraying the area with endosulphan which, says Dr Bowles, is deadly to tsetse flies, but is harmless to other forms of life at levels being used.

Purpose

Planned with military precision, the operation on the "Maun Front" has a dual purpose: to stop the advance of tsetse on areas where it has already been eradicated and to enable scientists to establish if eradication from the whole of the Okavango delta is possible in a relatively cheap and effective way.

But it is a campaign, since aerial spraying experiments started a few years ago, that has angered conservationists internationally who want to see the swamps preserved as one of Africa's last frontiers.

With a roar, 3-D ABN flashes overhead, rustling the brown, crinkled leaves of the mopane trees and causing a herd of giraffe silhoutted against the setting sun, to break into a stately trot.

The faint smell of endosulphan permeates the chilling air and Dr Bowles, Botswana's Chief Tsetse Control Officer, checks the fine spray for drift from the top of his battered Land-Rover. The operation takes place at night because the air is stiller then and the insecticide is not dispersed by wind.

Wind Drift

The aircraft, carrying 600 litres of endosulphan, banks slowly as Dr Bowles scrambles into the cab of his vehicle to drive the 300 metres to the next

navigation peg to confirm 3-D ABN is lined up for the flight to the corresponding peg on the other side of the block.

The aircraft carries R70,000 worth of navigation equipment of a type developed to home American nuclear missiles in on target, to track its course. But Dr Bowles must check constantly for wind drift to guarantee the whole area of the block is being sprayed consistently.

The process is being repeated in five or six phases until mid-October. Then intensive fly counts will be undertaken to determine what percentage of eradication has been achieved. Last year tests on a smaller block revealed 99.9 percent eradication (on current methods of assessment Dr Bowles admits might not be foolproof) and if a formula for total eradication can be perfected the spraying of the whole swamps might get the go-ahead.

Budget

For this, though, the bill could be in the region of R3-million and "Operation Tsetse" this year is accounting for roughly three-quarters of the tsetse control unit's annual budget of R400,000 a year.

The spraying must be done in carefully assessed phases to kill flies resistant to, or escaping, single sweeps.

Pregnant females, carrying one egg that hatches inside the body, are resistant to the level of endosulphan being used and they will only be killed when the tsetse lava [sic] has been deposited in the ground, where it pupates.

Fish

Likewise, pupa in the ground will miss a single sweep of spraying, or even hatch after the operation has been concluded.

It is crisp, early morning in a shallow lagoon off the Boro, one of the dredged waterways running through the swamps, and Peter Fox, a scientist studying fish for the British-based Centre for Overseas Pest Research (COPR) is hauling nets into a small boat. A crocodile slips into the water as the boat draws near.

The COPR falls under the auspices of Britain's Ministry of Overseas Development and has a four-man team, aided by United Nations and West German volunteers, monitoring the effects of endosulphan on the swamp's fragile ecology, and assessing the success of the spraying programme.

Tissues

Two entomologists are also due to arrive soon to study possible tsetse resistance to endosulphan and to work on the detection of low-density populations of flies.

Fox says he has found no serious side effects in the fish he has caught so far to test for traces of endosulphan.

Fish are extremely susceptible to endosulphan poisoning but, says Mr Fox, the level of application to the block--varying during the phases from 6 to 12 grammes per hectare--is not building up in tissue and so ultimately will not build up in birds and mammals at the end of food chains.

Bird Expert

But, although the COPR team will finish their field studies by December, a bird expert is staying on for a further year to study possible long-term effects in such species as fish eagles.

Dr Bowles says he is angry at the bitter and "misinformed" criticism that has been levelled at the spray campaign.

On the two-hour drive back to Maun from the cut-line at the end of the block, he points out that people die in Maun of sleeping sickness each year (health authorities put the figure at two fatalities a year in Maun alone and about 20 serious cases).

Effective

"I love the swamp and no one can accuse me of wanting to destroy them," says Dr Bowles, a British subject working on contract in Botswana.

He maintains that the spraying programme is an effective and harmless method of dealing with tsetse flies.

Without aerial spraying, Botswana's Department of Veterinary Services, to which Dr Bowles' unit is responsible, will have to continue the pains-taking business of ground-spraying where, says Dr Bowles, far more lethal insecticides are used.

He says endosulphan breaks down and becomes harmless in a few days after being sprayed and under present tests, has been found to be almost totally metabolised by fish within three weeks.

"I could rid the swamps tomorrow of tsetse fly by applying large doses of endosulphan, DDT or dieldrin. But we are trying to do it in a way that doesn't harm the environment and is economically feasible.

"We are aiming eventually at a one-off job, so that tsetse are eradicated in one go. But we don't want a real one-off operation that wipes out other things as well."

BRAZIL

RUST THREATENS PARANA COFFEE CROP AGAIN

Sao Paulo FOLHA DE SAO PAULO in Portuguese 22 Aug 77 p 6

[Text] Maringa--At the end of the coffee harvest in the northern part of Parana, an old problem has recurred: rust has again attacked the crop and the coffee growers are now faced with the need to make heavy investments to combat it.

INSECT PEST ATTACKS MINAS GERAIS PLANTATIONS

Sao Paulo FOLHA DE SAO PAULO in Portuguese 23 Aug 77 p 20

[Text] Belo Horizonte--The "Idi Amin" insect pest (a small fat black beetle) is attacking cotton plantations and plantings of beans and pasturage in the municipalities of Manga, Janauba and Porteirinha, posing a threat to the entire crop.

The "Idi Amin" beetle is an insect unknown in Minas Gerais, which was given this name because it is black and fat. It attacks en masse, taking over all the leaves of a plant, which shortly proceeds to die.

The farmers in the infested area have already informed the state agricultural system authorities of the phenomenon, but have received no aid thus far.

According to the president of the Janauba Rural Union, Walmir Nunes, the farmers do not know what action to take. They have applied a solution of [polidol] with [malathol], but no positive results were achieved.

The first municipality to be affected was Manga, from which the beetle spread to Janauba and Porteirinha, where the entire crop was threatened. The farmers fear that the "Idi Amin" beetle will attack other municipalities.

DISEASE ATTACKS SAO PAULO ORANGE GROVES

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 24 Aug 77 p 21

[Text] The entire central western region of the state of Sao Paulo is contaminated with citric canker, it was reported yesterday by agronomist Jose Elias, of the Regional Agriculture Division of Marilia, during a meeting with producers in the Tupa Agricultural Station. According to the specialist, there is still no effective fungicide to combat the disease. To get around the problem, the state's plant sanitation authorities have decided to destroy the plants that have been attacked by the citric canker. Now, to prevent the ailment from reaching the major zones whose production is destined for the foreign market, the technicians of the Agricultural Station are conducting a detailed study. The plants affected by the disease will be destroyed immediately, as well as those located within a 1,000 meter radius of the focus. In some cases the contamination has not had more serious repercussions because the affected orchards are small, as is the case with Tupa.

CHINCH BUG ATTACKS MINAS FARMS, PASTURES

Rio de Janeiro O GLOBO in Portuguese 22 Aug 77 p 2

[Text] Belo Horizonte (O GLOBO)--Several pastures in municipios of Minas Gerais and some in the state of Sao Paulo are being attacked by the chinch bug, an insect that sucks the sap from the plants, causing them to turn yellow and die. As has happened in the United States, the insect--cimex--can also attack corn, sorghum, oats and wheat, and has been observed on corn plants near pastures planted to "brachiaria," a type of grass used to improve the soil. The State System for Agricultural Research in Minas has been conducting studies in search of a solution to the problem, and in some regions of Minas a count is being taken of the bugs, whose scientific name is Blissus Leucopterous, to ascertain the variations in their occurrence during the year. Experiments are also being conducted to control the insect by treating the pastures with insecticides that are not highly toxic to cattle.

CUBA

PLANT DISEASE CONTROL PROVIDED BY STATE AGENCY

Havana GRANMA in Spanish 24 Jun 77 p 3

[Article by F. G. Davalos]

[Text] The State Service for Plant Disease Control (SEPP), the broadest and most important Cuban plant health program, is now being set up for the

purpose of having the maximum number of facilities operating throughout the country during this 5-year period between 1976 and 1980.

A network of territorial plant protection stations, laboratories, border posts and a National Scientific Research Institute are included in the SEPP project under the direction of our Ministry of Agriculture in cooperation with the USSR.

The objective of the State Service for Plant Disease Control is to promote the development of Cuban agriculture by creating an efficient system for fighting plagues, diseases and weeds affecting our economy's crops.

The basic functions of the SEPP include diagnosis through samples, determination of the type of pest by means of diagnostic means and recommendations on proper phytosanitary measures to be taken by the agricultural enterprise involved, under the supervision of the service.

SEPP Networks; Territorial Stations

In order to guarantee achievement of such important objectives, including the so-called plant quarantine at borders and in the interior of the country, the SEPP will have some 40 territorial plant protection stations. Those in Guines, Colon, Jaguey Grande, Santa Clara, Holguin, Las Tunas, Contramaestre and Guantanamo are already in operation and others are being set up.

The functions of these stations will be to point out or detect the appearance and development of plagues, diseases or weeds and to make the prognosis of their behavior in the assigned territory, which might include more than one municipality.

In addition to recommending the proper defense measures, the territorial plant protection stations will determine doses and ways of using insecticides and weed-killers, periodicity and other details for the best possible use of such products.

The station will also apply the necessary local quarantine measures in order to prevent contagion of nearby municipalities or agricultural areas.

In addition, these basic agencies are the vehicle for spreading advances in the field of plant health techniques among specialists, leaders and workers so that they might become better known.

SEPP Laboratories

Depending on their equipment and functions, the general laboratories of the State Service for Plant Disease Control may be of the types 1, 2 or 3, all of which constitute its analytic infrastructure.

The laboratories exist for the purpose of engaging in research, contributing to the detection and diagnosis of diseases that can affect plants, doing biologic studies on these problems and serving as teaching and training centers for technical personnel. The SEPP will have 14 laboratories of these three types.

In addition, the service will have the support of the so-called "biological fight laboratories," where the natural biological enemies of certain pests, diseases and weeds will be studied and produced.

Cuba has had facilities of this nature for years. They produce the famous lixophaga fly, which attacks the cane borer, and the trichogram, which acts as a parasite in other undesirable lepidopterons. Other similar biological means are being studied.

Quarantine at Borders

The maritime ports and international airports constitute our points of entry and exit where pests which do not exist in Cuba and which could be very harmful might enter the country. At these ports of entry, the SEPP has border stations.

Preventing the entry into the country or exit of quarantined objects which might be present in seeds, flowers, fruit, leaves, roots or other types of plant products is the objective of the border posts.

The State Service for Plant Disease Control provides for these stations--which are already operating--highly qualified personnel with the proper analytic means. By virtue of the necessary official importation of agricultural varieties of interest to the nation, the SEPP is contemplating the establishment of several post-entry quarantine stations (similar to the one operated by the Academy of Sciences on the Isle of Pines for sugar cane). These stations would be in charge of rigorous observation of these plants brought in from abroad so as to prevent harmful pests from entering the country.

SEPP Scientific Research Institute

Part of the personnel and equipment is already in Cuba and beginning to operate in what will be the most important support point of the SEPP: its research center located in Havana.

This national facility will study pests, diseases and weeds for the purpose of determining their characteristics and waging a more effective fight. It will try to determine the most suitable chemical and biological products and will train personnel of the State Service for Plant Disease Control. It will be the center of the protection network.

The research center and the rest of the facilities of the State Service for Plant Disease Control is being set up with the valuable help of the Soviet Union, which is providing technical assistance, laboratory equipment and other means, as well as its inestimable experience.

CUBAN REVIEW OF HYGIENE AND EPIDEMIOLOGY

Havana REVISTA CUBANA DE HIGIENE Y EPIDEMIOLOGIA in Spanish Jan-Apr 77 p 17

[English summary furnished by source]

[Excerpt] Direccion Nacional de Higiene. "Experiments on the Control of Vectors by Ultra-low Volume Application of Pesticides," REV CUB HIG EPID 15: 1, 1977

Results of three experiments on vectors control that were carried out in Havana and Camaguey provinces are presented. FONTAN R-11 ultra-low volume applicator as well as the pesticides nuvanol N 20 U and 95 percent malathion were used in the control of vectors. Casuistry techniques as well as the work methods used in each experiment are described. The initial rates of infestation by mosquitoes, flies, cockroaches and rodents and those obtained from the application of pesticides are analyzed. The equipment used in the experiments and the predominant mosquito species are pointed out. The inefficacy of the method used in the control of flies, cockroaches and rodents is stressed. The convenience of considering other technical data and the proper management of the equipment by the operators before its wide use in the National Program for Vectors Control are both emphasized.

NICARAGUA

NEW OUTBREAK OF COFFEE RUST REPORTED IN CARAZO

Madrid EFE in Spanish 0116 GMT 23 Sep 77 PA

[Text] Managua, 22 Sep--Technicians of the Nicaraguan Agriculture and Livestock Ministry who were dispatched to the area in Carazo Department afflicted with coffee rust have confirmed a new outbreak of the disease at the San Jorge Plantation near the city of Diriamba, 38 km south of Managua. The disease has thus spread beyond the agricultural cordon established by the technicians around 5,000 manzanas.

Leaders of the Nicaraguan coffee growers cooperative today told EFE that they were concerned about the new outbreak of coffee rust, which might indicate that it is spreading and seriously threatening the country's economy. Jorge Huezo, the cooperative's secretary, said that they are

asking Agriculture Minister Klaus Sengelmann to issue an official statement on the discovery of the new outbreak of coffee rust, since the ministry's silence on such matters prevents the coffee growers from using their resources to effectively combat the disease.

Despite the coffee rust outbreak, spokesmen of the Nicaraguan Coffee Institute have reported that the production of the current harvest will be over 1 million quintals. Meanwhile, the governments of Central America have still not remitted their contributions to the $20-million fund to combat coffee rust that was established by the Central American presidents during a meeting in Managua.

Managua Radio Corporacion in Spanish 1720 GMT 27 Sep 77 PA

[SERCANO Network]

[Text] The present environmental conditions and climate promote the reproduction of coffee rust disease, Agriculture Minister Klaus Sengelmann said here, explaining that this situation will prevail until after October. The minister said that because of this, 100 infected plants were discovered last week in the coffee zone of Carazo, which is already under quarantine.

Sengelmann said that this increase is normal and was expected by experts. In fact, he said that the rate could increase to 500 affected plants per week. He noted that after the disease was discovered in November 1976, 19,000 infected plants were discovered every week. The agriculture minister said that the government will take extensive measures to eradicate the coffee rust between December of this year and May 1978, when conditions will be adverse to the reproduction of the fungus.

PEOPLE'S REPUBLIC OF CHINA

ELIMINATING PESTS, PLANT DISEASES URGED

Foochow Fukien Provincial Service in Mandarin 0300 GMT 13 Sep 77 HK

[Excerpts from FUKIEN DAILY 13 September commentator's article: "Eliminate Insect Pests and Plant Diseases To Guarantee a Bumper Harvest"]

[Summary] Encouraged by the spirit of the 11th National CCP Congress, the masses of cadres and commune members in our province's rural areas are extensively mobilizing, vigorously enhancing their drive and using various effective measures to fight a people's war of eliminating insect pests and plant diseases.

The present period is one frequently plagued by plant diseases and insect pests and is the decisive time for eliminating them. Whether the work is done well has a bearing on the growth of several hundreds of millions of catties of grain. Comrades of various districts along with various departments must cooperate and completely understand the danger of insect pests and very tightly grasp their elimination. Leaders at all levels must go deep into the fields, personally investigate and study the scientific method of preventing and eliminating insect pests and plant diseases. Industrial, communications, supply and marketing departments must supply farm drugs, chemicals and other related materials to the agricultural front in a timely way.

It is necessary to concentrate efforts to fight a battle of annihilation and grasp the crucial points of the battle. We must do a good job of eliminating insect pests and plant diseases in paddy rice, sweet potatoes and other crops and reap an all-around bumper harvest. We must learn from the heroic people of Tachai and Hsiyang in eliminating insect pests and plant diseases and in combating other disasters. We must give full play to the wisdom and strength of the masses of our province who have accumulated very rich experiences in the struggle against pests over a long period of time. We must summarize and promote these experiences.

SHANTUNG PEST CONTROL

Peking NCNA Domestic Service in Chinese 0107 GMT 15 Sep 77 OW

[Text] Tsinan, 15 Sep--Yucheng County, Shantung, has applied borer-killing bacillus on large tracts of lands to control pests and has effectively protected crop growth. This year the county has produced more than 20,000 catties of bacillus powder and has brought more than 130,000 mou of land under control. Recently the concerned department of Shantung Province called a meeting in this county to propagate this method of biological pest control. Experiments over the past 4 years have shown that this bacillus effectively kills 90 percent of the corn borers. Pest control costs have been reduced to .02 yuan from .25 yuan for each mou of land. Now more than 20 units in the county produce this type of bacillus, including supply and marketing cooperatives, grain departments, schools and factories.

CSO: 5400 - END -